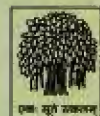


This is the biography of the black US scientist George Washington Carver who was born at the fag end of American slavery era; became an orphan to struggle against hard times; but eventually worked his way up to become a renowned agronomist and an educationist with a progressive vision. What is remarkable is the manner in which he manages to stick to his commitment despite odds, his dedication to gain education and his sincere endeavour to uplift his black brethren and the larger humanity. The original Marathi edition of this biography has positively influenced its readers that range from students, farmers, teachers to social workers. This English version shall have wider outreach and inspire more and more readers to see an opportunity in every challenge in life.

The author **Veena Gavankar** is a renowned biographer in Marathi literature. Her very first book *Ek Hota Carver* made her household name in Marathi reading community. She is known for her interactive and matter of fact narrating style. All her well-researched biographies have introduced socially committed personalities. She is a recipient of many critical acclaims and awards including Maharashtra State Literary Award. Her other works include *Dr. Ida Scudder*; *Sarpataadnya Dr. Raymond Ditmars*; *Dr. Saalim Ali*; *Dr. Khankhoje-Nahi Chira*; *Lise Meitner*; *Bhagirathache Waras*; *Rosalind Franklin: The Dark Lady of DNA*.

The translator **John Eraveli** is a postgraduate in English Literature. He taught English language and literature in Burhani College of Commerce & Arts, Mazgaon, Mumbai for 27 years. Although this book is his first major attempt in translating a work into English, the translation is in conformity with the spirit of the original Marathi version.



Rs. 75.00

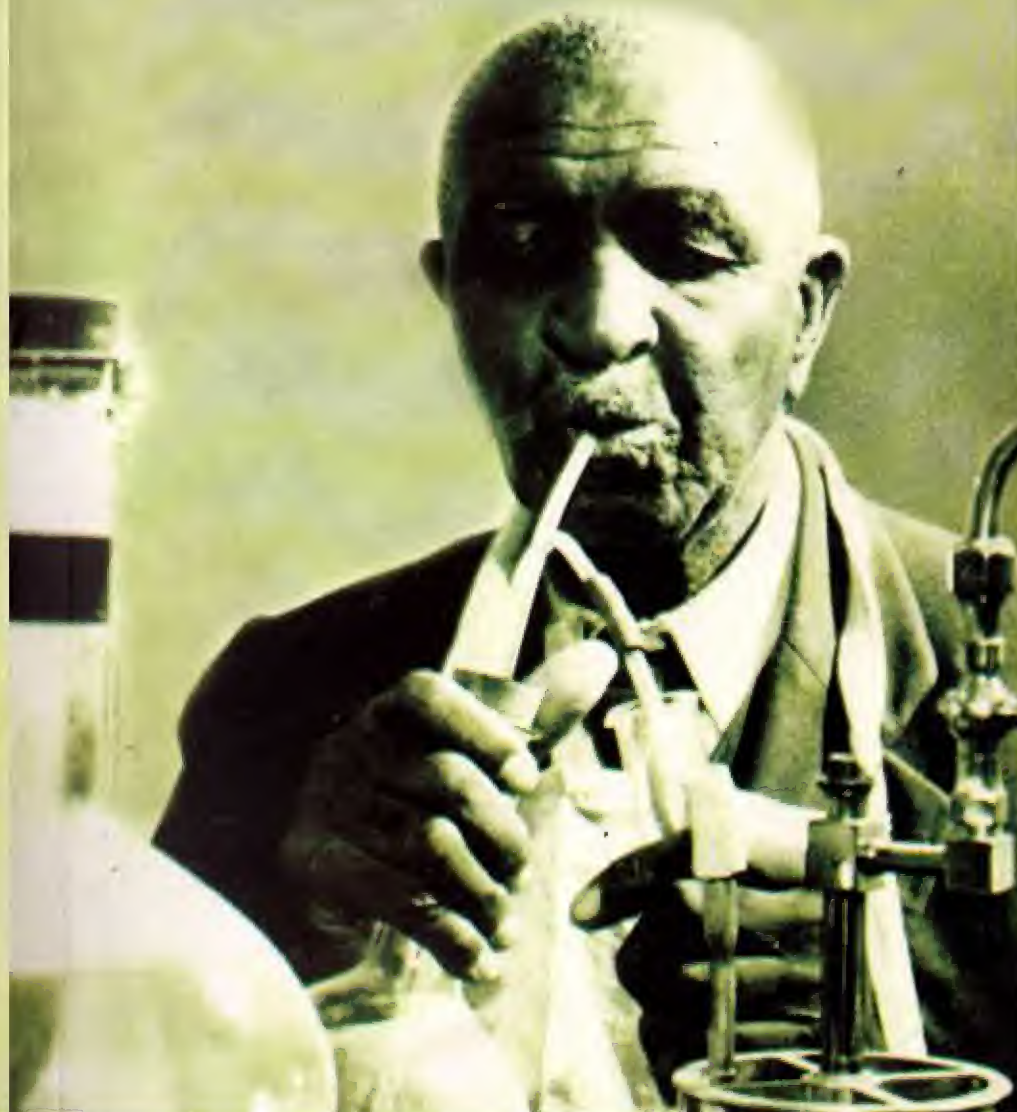
ISBN 978-81-237-5838-1

NATIONAL BOOK TRUST, INDIA

A Man Called CARVER

Veena Gavankar

Translation
John Eraveli



A Man Called
CARVER



Creative Learning Series

A Man Called **CARVER**

Veena Gavankar



Translation
John Eraveli



National Book Trust, India

Dedicated
to the fond memory of
late
Dr. Nisar Merchant
dentist, poet, philanthropist
and a friend

ISBN 978-81-237-5838-1

First Edition 2010 (*Saka* 1931)

© Veena Gavankar, 2009

Translation © National Book Trust, India

Ek Hota Carver (Marathi original)

Rs. 75.00

Published by the Director, National Book Trust, India

Nehru Bhawan, 5 Institutional Area, Phase-II

Vasant Kunj, New Delhi - 110070

Contents

<i>Author's Musings</i>	ix
<i>Acknowledgement</i>	xv
<i>Translator's Note</i>	xvii
Mary's Boy Child	1
A Zealous Aspirant	15
End of the Beginning	37
Freedom Stricken	63
O Alabama!	68
'I Will Come'	78
A Tryst With Tuskegee	83
A Ganges in Flux	103
Chemurgist	118
"Son, You Have Gratified Us"	128
'I Am Not Mine'	130
Science Shall Liberate You	147
I Am A Son of This Soil	155
Lead Kindly Light...	169
Fulfilment	181
'Mahanirvan'	198
Relevant Facets of G.W. Carver's Life	201

Author's Musings

I am a contented housewife and mother. After graduating from University of Pune with B.A. and a diploma in Library Science, I worked as a librarian in a college for four years. Books have always been my passion from childhood and I read avidly any book that came on my way. Biographies and autobiographies are my hot favourites.

Once, while ploughing through second-hand books lying on pavements in Fort area (South Mumbai), I chanced upon a thin book on a black scientist. The price was a mere fifty paise. Quite affordable. Eking some moments out from household chores, I began reading this book. I read once and was not satisfied. I could not grasp the contents completely. Facinated, I read the book again. This time I read savouring it's core message bit-by-bit. I was awe-struck by an extraordinary personality. The grandeur of the theme was beyond my comprehension. I realised for the first time in my life the advantage of an acquaintance with the English language. I was acquainted with a great life. The book written by Shirley Graham and Georgie Lipscomb struck at the roots of vanity in my heart—that I was well read. Had I not got the privilege of acquainting with the protagonist of this book, an irreparable vacuum would definitely have remained in my life. A rare and inexplicable sense of fulfilment had come to dwell in me.

It was my habit to read out to the children one or other story before putting them to sleep. Sheetal, my elder daughter

could read herself while Anoop needed the stories to be read out aloud. They had already become fans of characters like Rana Pratap, Rani of Jhansi, Banda Bahadur and the like. I felt that it was high time to introduce them to Dr Carver. Putting off the lamp, I began to narrate the 'story'. After some time I thought that the children were fast asleep. Now I was free to read. I lit the lamp and saw that their eyes were wide open. Sheetal's eyes were moist with tears. I asked her, "Why are you so sad?" She told me, "Mother, what would have been Carver's feelings when he came to know that the brigands had kidnapped his mother and that he was bartered for a horse? How did he manage to complete his education in top colleges. Definitely, he might have remembered his mother and felt for her. Isn't it? How would he have recollected her fate?"

I was speechless. Her questions embodied my own apprehensions. Somehow, I pacified her. She slept again. Following night, when Anoop insisted on hearing the 'story' of Carver all over again, Sheetal said: "Mother, can I tell you a better way out? You write down what you have narrated to me tonight. I can then read it out to him later."

On the following day, I was ready with an old and unused diary. I opened the book and started to write. I thought that within two or three hours the writing would get over. Fifteen days passed. And lo! The diary was full.

By then Carver had pitched his tent in my heart. I yearned to know more about that monumental personality. My husband searched the length and breadth of USIS library for more books on Carver. He chanced upon a remarkable biographical sketch written by Elliot Lawrence. I read the book twice and jotted down references. Then, armed with notes from these books and the narrative from the old diary, I re-wrote the whole 'story'. And that narrative filled a school exercise book of three hundred pages. How soon did six months elapse! I began to finish my household chores like busy working women and engaged in

writing till the children returned from school. Days fluttered away. I read and re-read at my own pace. I felt one day, that my narration had grown beyond the grasp of my ten-year-old daughter.

Charu Despande was a B.Pharm student endowed with a rich literary talent. He used to come to us occasionally, for a friendly chat. When Charu was laid up with fever, making virtue out of necessity, I entrusted the manuscript for his reading. Charu who recovered on the fourth day rushed to my home with increased enthusiasm. He said, "This indeed is a work of art and not mere transliteration. Why can't you brush this up and give to some periodical for serial publication?"

These words boosted my confidence. Without wasting a moment's time, I sent the manuscript to Mr Samant of Goregaon for his critical appreciation. His response was much quicker than I expected, he said, "This narration is pretty good and has a gripping style. There is some scope for improvement here and there, like the rippling growth of Tuskegee school, Booker T. Washington's activities and a more graphic description of the desolation of Alabama."

Soon thereafter, my hectic search for more books began. I found some reference books in Mumbai University Library. Mr Vasant Save of the USIS library managed to retrieve the following books: [1] 'Georgie. W. Carver' by Recham Holt, and [2] 'The Man Who Talks with the Flower' by Glean Clerk. Holt's book was a treasure trove of fresh information and full of Carver's photographs and memoirs. I was thrilled. Once again, I continued writing for hours together, as if I were enchanted. Reference notes and other necessary data piled up on my table. Once again, I re-wrote the whole subject matter from beginning to end. Steadily, there emerged a narration of about 200 foolscap pages in length. I do not know how one and a half years rolled over.

Mr Manerikar said, "Why are you keeping this book under

wrap? Publish it. This scientist is practically unknown to readers of Marathi language. I shall send Eknath Bhoir. He will prepare a press copy of this narrative in his elegant handwriting."

Eknath, a young man from the Aagri community engaged in salt making, was coming up on his own, struggling against odd circumstances. Gathering all writing materials, he started to copy the narration. One day he came and said, "I have stopped writing for the time being. I need to read the whole script to grasp it's content. The copying process disturbs my reading pace. I am eager to know what happened to this orphaned boy." After two days he came back and said, "I understand now my own struggles better. I regard him as one of us. There is no doubt that all like us should read this."

I felt that my own struggles were going to bear fruit. Though Georgie Carver came late to our midst, he is now part of our family of four. Our defects were bared in front of him. Yet we could see in his benevolent eyes a language of consolation. If one could only console that 'Orphaned Himalaya' even for once!

Whenever I prepare herbal potions for children, Dr Carver stands near me. When drying pulses and cereals in summer, he would be there too. He says:

"Daughter, you must have learnt to do all these either from your mother or mother-in-law right at home. Sure? Eighty years ago I had to knock at the doors of my ignorant and impoverished brethren to teach them these. How difficult was it to educate them then!"

Photographs of early struggles in Tuskegee that were in Dr Washington's book are dancing in front of my eyes. My mind zooms into a Tuskegee that was there decades ago. I enter the laboratory run in old log-cabins and see the broken terracotta pots, old tin containers, simple kerosene stoves, empty bottles, shapeless rubber bushes and a Carver sitting statuesque in their midst...

"Even a village school has a better laboratory," hearing my comment he laughs.

"When I came for the first time into the desolation of Alabama these were my only equipments. All my struggles to redeem Alabama were experimented with these now broken tools...", he said calmly.

Though I have learnt from Dr Carver how to roll and safe-keep the cotton strings used for tying packets, I admit that I can't work sitting in a place for a long time like him. When I read about great social workers like P.J. Devaras and Baba Amte, I go to Carver and ask him:

"Doctor, would you do us a favour? We need you now. Would you be kind enough to be born as a son of India? You already served America more than enough? How much did Dr Washington yearn for at least half a dozen Carvers in your country? Groom one of us ...otherwise, here will emerge another Alabama.... Like that of 1890s...stripped of forests...desolate wilderness..."

Veena Gavankar

Acknowledgement

I received letters of appreciation from many readers for the serial 'Ek Hota Carver' published in the Diwali issue of 'Manoos'. All liked the protagonist of this narration as he was from an unusually different background. Further, the presentation of the subject matter was of a novel kind and was therefore quite refreshing. Now, I gladly present the narration in book form as per the readers' wishes. Taking suggestions from my friends and well wishers, I made several corrections to update the book form, even by interpolating fresh data.

Esteemed personalities like Damodar Samant, Prof. Manericker, Vasant Save, Viswannath Chawdhury, Manjunath Nayak, Charudath Deshpande, all discussed and gave me valuable suggestions. Without their active help and encouragement, I could not have come to this point.

Hareshwar Thakur, who was a college student improvised the press copy in a publication-worthy style. Shirin Herawadker, Jaya Velankar and Madhuri Ghokale did the correction works sitting throughout the night as if this was their own family affair.

For this pictorial edition, Pradeep Talwalkar (Pune), Ananth Bhawe (Mumbai), P. R. Ghokhale (Aurangabad) and Pradeep and his wife Mrinalini Nayak (Kalyan) put their valuable share of efforts in this work.

And what to say about the editor of 'Manoos'? He dared to publish on a subject which was not off beat nor in the current trend. In fact they were more eager than myself to publish this

book. This book belongs to them only. That was the whole-hearted support received for any first work of literature. I was fortunate indeed. Not enough words to thank them, how and why and how much! I am grateful to all of them. Thanks.

Veena Gavankar

Translator's Note

Ek Hota Carver has been a great treat for the Marathi readership for the last two decades. The personality of Georgie Washington Carver, a black scientist and philanthropist, is so genuine that it begins to loom large in one's mind's horizon from the very first reading of the book.

I strongly feel that it was high time for Dr George Washington Carver to have been introduced to a wider readership, the English-speaking world. The life and times of Carver has a great significance in our times.

This translation work is dedicated to the fond memory of late Dr Nizar Merchant who introduced me to the book and its author.

With liberal encouragement from the author, her husband Chandrakant Gavankar, and my family I could complete this translation in little more than two year's time.

I acknowledge my indebtedness to my friend, lawyer, Milind Kanekar, who lent me a friendly hand when I had been floundering with this translation at crossroads. This is a book on a black scientist conceived and written by an Indian author in Marathi. Translating it into English idiom posed some problems.

This translation of *Ek Hota Carver* titled 'A Man Called Carver' is a tribute to a well-spent life, that of Georgie Washington Carver. I gladly present this translation to the English readership for their generous acceptance of the same.

John Eraveli

MARY'S BOY CHILD

"Heh! Get up....you lazy bum....must I come up there...eh?"

Hearing Moses' angry screams, the little black boy woke up from his sleep. He was quite frightened and got up in a hurry.

There was still time for the sun rise. Yet the old man was in a hurry!

"Other boys of your age know how to tend cows and draw milk. They can also mind pigs and poultry well. You dumb creature.... God knows what is going to befall you with these bony-rickety limbs of yours?"

"What's the commotion there dear? Don't harass the poor boy. He is only ten and is tired due to yesterday's exertion," Suzan said soothingly.

"Okay...okay. You tell me now. Who will help me in the fields? There's not a penny left in my hat...planting in this season has not gone off well. Even the standing crops would fail due to such laziness," Moses went on grumbling.

He panted and continuously coughed.

"O dear! Don't worry so much. By the grace of God everything is going to turn well for us. Look at this feeble little fellow...I can say for sure that he is going to be hale and hearty before long."

"May be! It's for his sake that I had to lose my fine horse. Who will make good my loss? Tell me...eh?"



Moses Carver was a German farmer who had settled down with his wife in the hamlet called Diamond Grove, in the state of Missouri, United States of America. He had a black slave called Mary whom he had purchased from General Grant for \$ 700. Moses disliked slavery in his heart of heart. Yet, he purchased Mary as a companion to his lonely wife at home and as an occasional helping hand in the fields.

A log-hut was built near the family stable for Mary's stay. Her husband was a lumberman. He had almost always been in the forest and visited her only rarely. Of late, when those occasions became very rare, she began to feel concerned about him. As if to confirm her worst fears, the awful news struck her one day like a bolt from the blue—that her husband had been killed in an accident some two months ago. What poor life of a slave! At least in this case she was fortunate enough to hear the news.

The wounds of Mary's sorrow had hardly been healed when Diamond Grove was rudely shaken one night by her pitiful cries for help. This happened sometime in early 1860s. Slave trade was still flourishing in many parts of America. Abducting slaves and re-selling them was a lucrative business.

One such gang spotted Mary. They raided the hamlet on the same night and carried her away. Hearing her cries for help Moses sprang to her hut with his loaded rifle. Listening to the fading clatter of horses' hooves, he stood there in dejection.

Suzan was frozen with fright. When she was able to reach the wood-hut with Moses' help, she was shell-shocked to see Mary's elder daughter breathing her last. Her eldest son Jim was shivering all over and hid himself in a dark corner. So he was spared. Mary and her two-month-old child were carried away.

Many black slaves were similarly abducted from Diamond Grove and its vicinity on that fateful night. Moses somehow waited for the day to break. With the help of some influential farmers of the locality he strived to secure the release of Mary

and her child. He was even ready to part with a portion of his land-holdings in the bargain. In spite of holding hectic negotiations with the abductors, Moses did not succeed in getting Mary back. He could only carry home her two-month-old child who was at the threshold of death.

The sickly child could hardly breathe and no one expected that it would survive for long. Weak breathing and recurring bouts of whooping cough continued to plague the child's feeble life. Yet, Susan's determined efforts salvaged the tender bloom from the jaws of death.

Gradually, the child's long spells of cough abated and he began to swallow smashed gruels in bits. In the fitness of time it crawled and then began to cavort and toddle around. Damage to his vocal chords was compounded by an affliction of infantile asthma and so he could not babble like other children in due course.

Yet, he began to grow up under the loving care of the Carver family, being blissfully ignorant of the fact that he had been bought back by ransoming a fine horse. No one knew thereafter the whereabouts of this boy child's unfortunate mother. It was not easy for Moses to dispel the nightmarish experience of Mary's abduction, however much he tried. He was well aware of Susan's efforts in bringing up the child. Moses never considered Mary as a mere slave. He had a soft corner somewhere in his heart for Mary's boy-child. And Susan knew that well.



The civil war ended and slavery was legally abolished in the United States. Ordinary life frayed by a prolonged and disruptive war began to be on the mend. Agricultural activities began to pick up momentum. Vegetation around Diamond Grove and the neighbouring Ozark Mountain ranges bloomed immensely and blushed with flowers and berries in sheer bliss. The orphan child of the Carver household began to live and move under the

benevolent warmth of a blooming nature.

When the boy was ten, Moses entrusted to him the care of the garden in the backyard of the household. The boy liked those works and did them with a lot of interest and care. He used to give the garden a face-lift by creating new beds for planting fresh saplings and transplanting some of the existing ones to spots where more sunlight would be focussed. That was his hobby and a fine way of spending his leisurely hours usefully.

Mrs Muller was a new settler in the neighbourhood of the Carver household. One day she paid a visit to the Carvers for a friendly chat and was thrilled by the sight of the beautifully kept garden in the backyard of the household. She did not know the names of some of the plants there. Seeing her embarrassment Suzan called the 'little gardener' who came there instantly crooning some distant tunes.

"Suzan, you only told me that the boy was dumb...how is it that he is humming now?"

"Oh! He is in fact dumb. Beyond uttering occasionally some broken words, he cannot communicate much. He seems to be very happy in the company of flowers, fruits, plants and seed-sprouts. His mother used to croon such soulful tunes when she was happy."

Mrs Muller could not hide her amazement at the sight of the beautifully kept garden. She openly expressed her appreciation for the boy by patting on his back. He wondered:

'Do people like her know anything about plants? Is their appreciation of plants genuine or mere display of curiosity?'

Moses Carver was well aware of this dumb boy's wider interests such as his general ability for observation and his acumen for close examination of plants and insects. Even the smallest of them could not escape his scrutiny. The plants in Moses' homestead grew safe and sound because of the boy. Moses was immensely pleased with him.

The queer friend circle of this lonely-mute boy consisted of

the bushes of the woods, twittering little birds therein and the tiny fishes of the ponds. Occasional thrashes from Moses were incapable of snapping off the strange bond that the boy had developed with them. Once he had woven a little nest using dry barks, leaves, hay and threads. It looked very natural. Suzan would solemnly affirm to the passers-by that it was indeed crafted by her lovely-mute boy.

This boy had no difficulty in getting easily absorbed into the world of plants and insects. Lying prone on the ground he used to observe seed-sprouts, termites and the like for hours together. These ecstatic moments provided him with an amazingly fit language of plants and bees. A deeper knowledge thus gained, enabled him to share with them even their infirmities and sorrows! In such moments it looked as though he would merge with them while becoming a living tree himself. Often Moses would comment:

"If you want to know the mind of trees, their likes and dislikes and deal with them, then learn from our boy."

The neighbours called him 'little gardener'. They used to call him to give proper 'treatment' to their plants. He was indeed glad to give a face lift to their gardens by manuring, watering, transplanting, stirring, pruning or treating them.

Mrs Banyam lived in the neighbourhood of the Carver family. She was disheartened by the crest-fallen looks of her garden, which could hardly be called one. One afternoon, she came to the Carver family and took home the 'little gardener' with her. After leaving him in the garden she went inside the house. The boy took round of the garden and did all what was immediately required. After the works were over, he came to the porch to see Banyam. Peeping in, he was enthralled to see the watercolour paintings that adorned her living room walls. He was lost in a trance and he hardly felt her presence behind him.

"You like to paint...boy?"

Startled, he turned back. "I...I...like," he simply stuttered.

"Did you not come to nurture my roses?"

"Need light.... Change places."

Now he could talk in broken sentences if he exerted a little. Banyam was highly pleased to see the works done by the boy in her garden within such a short time. He had already transplanted some of the saplings to spots where they could get more sunlight.

"You have done my job well. Boy, keep this..."

She gave him a one-dollar coin. Holding it in his tightened fists he walked back home. Along the way he had forgotten all about the coin and the garden. Instead, the colours spread on the canvas were dancing in front of his eyes.

Once home, he began bothering Suzan with innocent requests. Somehow he expressed his desire to know more about the paintings hanging on the walls of their house. Knowing well the boy's deeper yearnings, Suzan tried to explain to him the colour pattern as best as she could. One more hobby was born there.

He used to spend his spare time in making different sorts of colours by crushing fresh fruits and tender leaves. Then he began to paint on broken glasses using bird feathers as brush. On occasions when neither glass pieces nor wooden planks were handy, he would translate his inspiration on flat stone surfaces!

Jim, his elder brother, was able-bodied and was capable of working hard in Moses' farms.

Since the younger one was of weak constitution he was left at home with Suzan. Moving around freely in the household, he observed with his wide-open eyes the various works done by Suzan. The boy quickly learned how to make candles, tan animal skin, mix spices, and bake bread and biscuits, cleaning chimneys and even attending to the hearth. While training him, her thoughts would run:

'He is too weak to do any hard labour. So, let him learn such works to make a living.'

Carver family spent on food as was reasonably needed but all expenditure was well balanced. Except sugar and coffee they never bought anything from outside. Suzan used to make provision for other necessary items in the household itself. Gradually, the orphan boy absorbed this culture of thrift and moderation as he grew up. Carver family did not consider these two black brothers as orphans. As slavery had been abolished they were free to go anywhere else. Yet they preferred to live under the care and protection of the Carver family, as they had no other place to go.



When he was able to mend for himself, Jim left the household in search of his luck elsewhere. Where could the young one go? Seeing his humility and genuineness the Carver family christened him giving the name Georgie*. After all it was great Georgie Washington's name! Tags like 'dumb child' and 'little gardener' were now replaced by his real name. Suzan adamantly refused to send away this weak and meek boy anywhere else, for he was her Mary's darling boy child. Georgie did not want to leave the household either, as he was not sure of his mother's death. He used to sweep, mop and keep clean his mother's log-hut and eagerly waited for her homecoming.

Whenever Georgie asked Suzan about his mother, she would only keep silence with tears swelling up her eyes. One day when he persisted, with moist eyes and choked-breath she said:

"Boy, your mother was a very nice creature. Something like you are. You got this habit of humming tunes from your mother. She had a quick and efficient work habit. Though she was illiterate, she had an amazing memory and just by observing she used to quickly pick-up any sort of work."

* Until he reached college everyone endearingly called him Georgie.

One day Moses grumbled:

"This boy is turning troublesome. He is asking me 'why the grass is green? How can the grasshopper skip and jump as and when it likes? Where do the sunbeams of dawn disappear by evening? How much time does it take to form the colours of a rainbow?' Are they not enough to trouble a man? He is showing off a lot these days...ah."

"O dear! Now I know the secret of sending him for my help. I have no trouble with him. On the contrary when he is with me all my works get done faster." Suzan sniggered.

This only helped to augment Moses' annoyance. He snapped:

"Undoubtedly, he is more fit for the kitchen than the field...."

Suzan then regretfully reflected:

'Is it his mistake that he is not growing properly? He is ten years now. Oh God! It's high time that he had been sent to a school.'

As if reading Suzan's mind, Moses said with concern:

"There is no suitable school for black children nearby. Then, what's the use of black children studying?"

"In that case, it is better to send him somewhere to pick up some useful skill for a living. Otherwise he would roam around the trees here and waste his time. Nowadays, it is difficult to make a living."

Suzan then reminded Moses of an appointment that had been fixed some time back with an agricultural expert from Switzerland. Moses hurried to finish the pending works, so that he could start early next morning.

Mr Herman Jaegar had come from Switzerland to Missouri to test whether or not the soil and climate there were amenable to large-scale vine cultivation. Fortunately, it was found that they were suitable for the natural growth of grapes. Hearing the good news, Moses too planned to expand his vineyard with

Georgie's help. When Mr Jaegar had visited Diamond Grove earlier, he appreciated Georgie's diligence in following his instructions on viticulture including the care to be taken while preparing the vine climbers.

One had to keep constant night vigils against termites and other pests attacking vine creepers. Moses thought that these sorts of agricultural experiments would enhance Georgie's experience and skill.

'Perhaps that may be an answer to Suzan's anxiety for Georgie's learning a skill to make a living for himself.'

"Georgie, have you forgotten about our visit tomorrow to Mr Jaegar in his estate?"

"No... Uncle. Want... See there."

"I see..."

"Grapes...only purple?"

"I don't know...but I'm sure that all grapes are not purple. There are green ones too. Georgie, I don't have answers to all your funny questions. Eh!"

"Does God know?"

"Of course. Is there anything in this universe that God does not know?"

"Then...me...ask God..."

Georgie playfully flip-flopped and was going his way. Seething with indignation at this seemingly blasphemous talk, Moses called him back to reprimand him.

Once again Suzan chimed in the scene. "O dear! Leave him alone."

"Why should I? This is too much pride for a boy. Don't you know that God's name can't be invoked in vain? Can God be waiting to come at his beck and call?"

"Perhaps...so." Suzan said thoughtfully.

"Suzan, you too...?"

Yet after a moment's reflection Moses told her gravely, "Suzan, what you said earlier seems to be true. It's high time

that we taught the boy to read and write. A heathen should not grow up in a God fearing family like ours."

"Mrs Muller has given him a spell-book. He says that he has already mastered it...."

"May be, but he must learn before long to read the Bible and talk about God with reverence," Moses said with an air of finality.

Early next morning, Moses and Georgie set out to Mr Jaegar's farm that lay beyond the little town of Neosho. Georgie sat quite blithely at the rear of the cart dangling his bare legs down. Seeing his lean and hungry figure, the onlookers might have rightly thought of him to be the black boy of the Carver household. Georgie had no complexes that weighed him down on account of his looks nor was he ashamed of the poor clothes he had worn. This attitude remained with him throughout his life giving him the fuel to push forward in life.



By noon, Moses tethered the horse on a bough beneath the shade of a sprawling tree on the wayside. There, under the cool shade, they unpacked and ate heartily the lunch that Suzan had packed for them. Seeing a white man and a black boy sharing their lunch, the passers-by wondered. Of course, apartheid was not easy to be abolished from human hearts. Soon after the meals, while Moses leaned against the tree and caught forty winks, Georgie briefly looked around the place. Within an hour they resumed their onward journey.

Georgie was highly excited to see Mr Jaegar's farm and the well-maintained garden within it. While Mr Jaegar and Moses were engaged in conversation, Georgie walked around the garden. The pleasing looks of the garden, decked with flowers of myriad hues that bloomed against the backdrop of a verdant greenery, thrilled him. He felt in his breathless ecstasy, that it was truly the paradise! At that time, Georgie had not even had

a vague idea that he was going to turn a barren land into another paradise in the near future with the Midas touch of his long lean fingers.

Georgie went down on his hunches and caressed some of the tender saplings that were kept in a large basin for fresh planting. Holding the purple bunches of ripened grapes in his cupped palms, Georgie murmured sweet nothings to them. Then he combed his soft lean fingers through the tender vine creepers and went on exuberantly humming some distant tunes. Mr Jaegar observed Georgie's excitement and asked Moses, "It seems that the boy likes my garden."

While nodding in agreement, Moses too felt that the garden was really wonderful. Jaegar called Georgie near and asked him, "You love plants. Don't you?"

Georgie could only raise his eyes up for want of words. Their eyes met and conversed for a moment. Their minds knew the language of silence. Georgie's heart's yearnings were now getting clearer. He felt that the mentor whom he had been searching for, was standing in front of him. In the surging waves of feelings words flowed out.

"Yes-yes," he stretched his arms wide, "everything!"

Holding Georgie's long lean fingers Jaegar said, "Look, these hands are that of a good gardener, that could create with a life-giving touch." Then, lightly releasing Georgie's hand, Jaegar asked Moses, "Is he the little gardner, who takes care of your vineyard?"

Moses transpired to Jaegar everything about Georgie. With concern Moses said, "A black can earn his daily bread only by the sweat of his brow. He needs physical strength for that. I don't think, that this boy will have enough of it. Though he is free now, he is unwilling to leave us. Can he wet his beaks struggling in the outside world?"

Mr Jaegar then turned to Georgie and shared with him lots of information on plants and insects. He was imparted with the

secrets of grafting vine-creepers. Further, Jaegar explained to him the reasons why one could enhance the yield of grapes by graft.

"Right now I am researching on a superior variety of vine. With divine help my attempts would definitely bear fruit. All the earth belongs to God. He is your Father too."

"My Father!" Georgie exclaimed ecstatically.

Jaegar continued, "Truly, the heavenly Father is yours too. You are lonely like the trees in the forest. Merciful God has given you these long and lean fingers. They are creative and so use them. Listen to the call of God in your inner voice. I too am doing so. Thus, take part in God's works."

Georgie recalled the words from the Bible that were often read out by Moses, "This earth belongs to God...."

When it was time to return, Jaegar gave Georgie a book full of pictures and said, "You take this. Open your eyes and see the developments that are going on around you. That alone will teach you a lot of new things about life that is unfolding every day. Once you learn to read, read this book too. Go on reading many more books. Almighty God will then reveal more things to you. Let your knowledge expand and widen your horizon as much as possible...."

By evening, they got ready to return. The rare meeting with Jaegar caused the rising of a new moon in Georgie's mind. He learnt lots of new things about life in one day. He could see a new world.

Moses too was fired up by Jaegar's words. He got insights into new methods of cultivation and yearned to do more in life. Yet, stealing thoughts of advancing age dampened his spirits. The fact that he had no children further discouraged him.

'If Georgie had only grown faster!'

Had he been strong enough Moses would have entrusted his entire legacy to him. He thought, 'Georgie has a lot of knowledge about plants. The pity is that he can't even hold the

plough steady. What responsibility is he going to shoulder?"

On their return, Moses said, "Georgie, there is a school for black children in Neosho town where we went today. Do you want to join that school?" Georgie fumbled for words, as the idea overwhelmed him. It was very painful for him to leave the warm security of the Carver household and face an uncertain world. Then, he remembered, 'The whole of earth is my family. I have to share my responsibility in my Father's business'.



A week later, Georgie walked along the road to Neosho once again. This time he was alone. Moses had planned to accompany him, but due to some sudden illness, he was unable to go.

After altering an old pair of trousers worn by Moses, Suzan made a new pair ready to fit Georgie's size. That was the only dress he had on. In addition to it, Mrs Mueller provided him an old shawl. The old spelling book and the picture book given by Mr Jaegar, were his only study materials. He had not forgotten to take with him the penknife he used for cutting twigs. His lunch pack consisted of some eatables and a big apple that Suzan had carefully packed for him. He had tied together the laces of an old pair of shoes, the only one he had, and slung them on his shoulders, as a precaution against wear and tear while walking the metalled road. The one-dollar coin that was given to him by Mrs Banyam was very carefully kept in his shoulder rag.

While preparations for the journey to Neosho were going on in full swing, his elder brother Jim came to Diamond Grove to see off Georgie. Jim asked of him, "Why do you want to go to an uncertain world leaving the safety of Diamond Grove? Have you not already learnt the alphabets? I think that it is more than enough."

"Who told ... that learning ... complete with alphabets? I want to learn a lot of words.... Until I can write books." Poor Jim was stunned by this firm answer.

Suzan could not find any blemish in Georgie's character. While reluctantly bidding him farewell Suzan reminded him, "When you reach the new place, go to some big household and tell them that you can tend fires, cook and wash. As domestic hands are hard to get, they will surely take you in." Moses then cautioned him, "Don't forget that you are a free man now. Never allow any one to take advantage of you. There are many such people in this world who would like to do so."

Tears welled up in the eyes of the old couple, while bidding Georgie farewell. As he reached the bend of the road, he looked back. Only for once. Then, the ten-year-old orphan walked along the thorny path towards an unknown horizon. An inexplicable anguish gripped his soul. One step and then another...he walked along the rough road ahead ... in a ceaseless quest for knowledge!



A ZEALOUS ASPIRANT

Georgie reached Neosho very late in the night. The long-hauled walk through a rough and bumpy road thoroughly exhausted him. Foot-sore and weary, he crept into an old barn and instantly fell asleep. Early in the morning he woke up and saw his strange bedfellow—a large dog which lay down beside him. If only he had known it in the dead of night!

Early that morning Georgie stepped into the precincts of the school for black children and savoured his first experience of learning. His unkempt dressing and scare crow looks stirred the curiosity of the little assembly of students there. Wisps of hay clung to his curly hair. Due to his stammer and queer piping voice, they stared at him in amazement.

When school was dismissed, the children dispersed. Since Georgie had nowhere to go, he sat in the class quite forlorn. The teacher told him to go and Georgie came out of the classroom. He had not the slightest idea where to go. Almost then aunt Suzan's words flashed upon his mind and he walked along unfamiliar lanes in search of 'big houses'. Who could have kept work ready for a tiny black boy?

At the end of a hard day's search, some one had opened a door for him. He started to live on his paltry income from running errands. Yet, he suffered three day's hunger before learning that his money could buy him food. Once while searching for work, a shopkeeper slapped him taking him for a loafer. It was yet another painful lesson!

Georgie attended school regularly with an unflinching resolve. After school hours, he engaged himself in various works to eke out a modest living. He spent the nights on the corridor

of the same dilapidated barn that was his shelter since he came to Neosho. Lying down there on sack and bale of hay with a half-filled stomach he dreamt of another day full of work and study. Amidst all these trials he was determined not to miss any class of instruction. His stammer eased a wee-bit but the piped voice remained quite pronounced.

The after-taste of a bitter encounter with the winter of his first year in Neosho lingered on in Georgie's mind for long. In those days of frost and bitter chill, life seemed to begin anew almost every day. The sheer fact that life could be sustained throughout the night was itself considered a miracle in the morning. How Georgie endured the remorselessly chill winter weather in the absence of proper food and warm clothing is yet another mystery. Though Georgie seemed to have emerged unscathed from all those trials, they had etched a number of scars in his deep core.

Spring arrived in Neosho. The black school would usually be closed at the onset of the season. This was to enlist the physical support of children in the agricultural efforts of their parents. Since Georgie had no such commitments, he planned to visit Mr Jaegar, who lived in the outskirts of Neosho. He wanted to tell Mr Jaegar in so many words that it was he who had kindled in him a desire for knowledge and that his present zeal for fast learning springs from his desire to read the book given to him. He wanted to tell Mr Jaegar that he had not given up his studies even in the face of stiff resistance from hunger. And then he hoped to get a pat of appreciation from Mr Jaegar. Spinning colourful dreams of the imminent visit, he reached the gates of the estate soon.

Georgie's world came crashing down when he heard at the gates of the farm that Mr Jaegar had passed away some two months ago. The terrible winter that somehow spared Georgie's life had mercilessly frozen the valuable life of Mr Jaegar. Dismayed and sad he walked back. The rumblings of the sad news disturbed

him for long. Georgie later recalled that experience once, "I don't get words to express the measure of sorrow I had experienced then, and I don't know how I returned to Neosho from Mr Jaegar's farm. I was almost drowned in gloom and dejection."

One night Georgie was sleeping as usual in the corridor of the barn. Someone woke him up in the dead of night. It was the owner himself who came there. Georgie feared that his days there would soon end. He was afraid of being severely scolded or even physically bashed up. Georgie, who was tired and starved, cried helplessly.

"Stop-stop I am not going to hurt you. Who are you boy? What are you doing here?" the white man said kindly. Georgie looked incredibly through the veil of his tears. "Who are you boy? Tell me why you are sleeping in such an unsafe place?" Georgie fumbled for words as his sobs increased his stammer.

Warmed up by those soothing words, Georgie narrated the sad saga of his life to the white man whose name was John Martin. He was visibly moved by Georgie's account of himself. He said to Georgie, "Don't be afraid, come along with me."

At the dining table of John Martin's neat little house, Georgie had eaten what could be called a square meal, after a long time. He was then shown a camp bed in the back shed where he fell sleep. That was indeed a sound sleep gifted by a full stomach.

Georgie began to live with the Martins from that day. John Martin worked in a flourmill for a living and was not quite well off. Yet, he helped black children whenever possible. Since the Martins had no children, they began to consider Georgie as their own. The kind couple did not realize the enormity of debt destiny had owed them. They could neither measure the abundance of grace that one act of kindness had earned for them.

Each passing day brought to light Georgie's good traits one by one including his cooking skill, sense of propriety and hygiene.

The Martins never kept up the garden in front of their house attractively enough. Georgie stirred the growth of the plants and within a short while gave a face-lift to the garden. Soon he spaded up the vacant yard and requested for another fresh measure of seeds.

Since the Martins could not afford to pay Georgie for all the jobs he did, they encouraged him to find work in other households as well. He would get up even before Mrs Martin and finish all the household chores. After breakfast, it was his turn to go out in search of odd jobs in the neighbourhood. Nevertheless, he attended school very regularly. He showed more confidence and joy in his general behaviour as survival was more or less assured. He began to come out of his shell and began to mix with people more freely. His searching mind and a thirst for knowledge endeared him to John Martin.

Yet, the Martins noticed Georgie's inability to feel at home with the new surroundings. John thought that if Georgie could get the company of blacks he might shed some of his listlessness.

Accordingly, at the prompting of John Martin, Georgie went on one Sunday to a separate church for blacks. The community there was elegantly dressed in their Sunday best. He occupied one of the back pews in the church to avoid the glare of others.

The soulful hymns sung in the church strummed on some tender chords in Georgie's heart and vague childhood memories flowed out in a flourish.

'My mother might have put me to sleep with such lilting lullabies,' he thought while sinking into an ecstatic trance. The sermon was not appealing. 'No one quite knows God as did Mr Jaegar,' he thought.

Georgie met there a middle-aged woman called Maria. She was a plump matron with a pleasant nature. She nurtured a benevolent heart in her corpulent body. She spoke to Georgie with motherly affection and inquired about his background. Even Georgie felt a natural affinity towards her. The rustling murmurs

of her clean frock and affectionate words reminded him of aunt Suzan.

Soon the ceremonies in the church bored him. He preferred to listen to the hymns plying on the lawn outside. In course of time, he learnt to see God in nature. A communion with nature gave him enough peace of mind and his joy of life reached its peak. And in course of time, this habit of finding delight in nature's presence, developed into a second nature in him.

Gradual changes taking place in Georgie did not escape the notice of the Martins. They did not compel him any more to go to church. John Martin found another way to drive away Georgie's loneliness. One day he sent him with the neighbourly children for fishing in a nearby river. John saw Georgie going with others quite elatedly. In fact Georgie stepped down into the river with the other children for fishing. When they casted their baited-angles into the river to catch fish, Georgie shouted at the top of his voice, "If you all kill these little fishes, God will punish you." And then he ran away to the nearby wood.

Georgie was getting used to the rigours of school life by the end of that academic year. Though some of his peculiarities stood out, no one really cared to treat him differently. On a frosty February night Mrs John Martin suddenly fell ill. She ran high fever and her condition got worsened by the hour. It was even difficult to say whether or not she would recover. Georgie remained absent from the school on those days and was constantly about her bed to nurse her. Entire care of the family was on his tender shoulders. He did the household chores like cooking, sweeping and washing with exceptional skill and diligence. During free time he entertained Mrs John Martin with his mimics and simian antics. This may be the starting point of a skill and quick wit with which Prof. Carver would entertain others in future. As a result of his sincere nursing, Mrs John Martin showed signs of recovery.

'How fortunate am I to have Georgie to take care of the

home and hearth,' John Martin would think on his way to work. Meanwhile Georgie's studies picked up momentum. It was a heartening sight to see a lanky white man and a tiny black boy sitting together to learn at night.

As Georgie's studies picked up momentum, he used to do any work that came by and accepted any amount by way of wages during that period.

Normalcy returned when Mrs John Martin's health began to improve. It was then Georgie's turn to go in search of works outside. Unfortunately, the flourmill that provided the Martin family its daily bread was closed down. So they had to migrate to California to their relatives in search of livelihood. Before leaving, they did all they could for the continuation of Georgie's studies. They also advised him that the free state of Kansas was an ideal place for pursuing further studies once his schooling in Neosho would get over. Kansas was sixty miles from Neosho and that was a considerable distance during those days.

This was the time when Maria came forward to Georgie's aid. She took him lovingly to her humble home. He liked the neat and tidy upkeep of her little house. It was a rare blend of faith, mutual affection and hope for the coming day that sustained the togetherness of Maria and her husband Andy. Maria said to Georgie in a tone of reassurance, "Son, God provides for everyone and entrusts each one with a specific duty. Acts of God are neither accidental nor incidental. And it was the same providence that has brought you here."

Georgie felt at home in Maria's neat little house. He was immensely pleased with her knitting, stitching and darning. Before long he too developed a remarkable proficiency in these skills. After all, his long lean fingers were capable of quickly picking up any useful skill. This passion for fast learning was an innate quality that egged him on in his onward march.

Each night Maria made Georgie read out relevant passages from the Bible. Those daily reading sessions were so regular that

Georgie learnt by heart some of the striking scriptural passages. This skill enabled him to recall and recite those passages, during dark nights when even candlelight was not available. Illiterate women of the neighbourhood, who heard about this exceptional skill in Georgie, poured affection on him from their hearts' fill. Covering their ears with open palms they murmured their favourite chants to ward off 'evil eye' on him. "Mother, this lad is very lovely. He talks like a parrot." When Maria heard such compliments from the neighbourly women, her heart would swell with loving pride.

One night, after finishing the usual reading, Maria said, "My son, how nicely do you read from the Holy Scripture! I am sure you can become an excellent pastor."

"No...no...I don't like to become a priest," Georgie protested.

"Georgie likes to become a teacher," Andy expressed his opinion.

"No. I don't want that either. I want to do something different," Georgie said definitely.

"What do you mean by different?" Andy was inquisitive.

"See...like this," Georgie said, while showing the article in hand. It was a sketch of a rose flower engraved on a wooden plank. They recalled that he had been at work on something for the past several days. In fact they were immensely pleased to see that 'work of art'.

"You are great my son. Undoubtedly, you will attain crowning glory in whatever attempts you make," Andy said in sincere appreciation of Georgie's efforts.

Georgie continued his studies. Since Maria's house was near the school, he could help her in household chores before and after the school hours. Often, he used to rush home during lunch breaks to finish whatever works that remained unfinished. He did all kinds of works from cleaning courtyards, maintaining gardens, chipping firewood, to washing clothes and the like. He

never refused any works that came his way and accepted whatever wages that were given.

In those days (1870-1880), black children were not given textbooks free of cost. Naturally, Georgie was not able to purchase them. He depended on the goodwill of children from well-to-do families for his study materials like slate, textbooks and notebooks. Georgie used to return these favours by chipping firewood or sweeping their courtyards.

Days passed on. Georgie had already learnt whatever the Neosho Negro School could teach him. Teachers were in fact fed up of his questions, as they themselves could not answer many of them. It was high time for him to go to a higher division in a school. After searching high and low, Georgie came to know that there was a school in Fort Scott by the same name.



Before Georgie left Neosho, his elder brother Jim came to meet him. They took a snap shot together in a fair that was going on nearby. Before leaving Neosho, Georgie gave aunt Maria a unique gift. It was a rare specimen of knitted scarf that was indeed a masterpiece. He had studied its model displayed on the glass window of a ready-made garment show room and knitted it himself.

Maria was extremely pleased to be the proud possessor of the scarf. Turning it in various angles, she would examine its intricate patterns and the gracefully soft threads of myriad hues. She would fall into a trance while appreciating the scarf. Maria too gave him an unforgettable present that remained with him as her living memento. It was a brown leather-bound copy of the Bible, Georgie's life-time companion, that remained with him till his last breath. And he found solace in it during his final moments.

When Georgie left Neosho, Maria felt a severe pain that reached the deepest pits of her stomach.

'God alone knows where did this thin cherubic boy appear from, and where does he go from here!' And then, her lips muttered a silent prayer for him: "God Almighty, provide him with a wise mentor on his way ahead...." It was the year 1876. This tiny boy was leaping towards the unknown relying on his own legs and will. This was his second flight for knowledge.



Georgie reached Fort Scott on a cold day in the month of January. There again, the problem of food and shelter raised its ugly head. His usual solution was to search for odd jobs here and there. At the end of a ceaseless search someone directed him to one Mrs Payne. She was looking for a maid to do household chores. Yet, she thought of giving him a try as he had already landed there.

"Do you know how to cook?"

"Yes, I know very well," he replied. After he had a wash, she led him to the kitchen. The aroma of boiling meat filled the kitchen enhancing his hunger. And the hunger weakened him further. Georgie tried his best to control himself.

'I have to show my skill here if I want to get succour,' he reasoned with his own soul.

Georgie cooked food using the ingredients provided by Mrs Payne. In between the cooking, he had not forgotten to inquire about her taste buds and preferences, while answering patiently a hundred curious questions she asked of him. Indeed, Mrs Payne could not resist liking him for his open behaviour, neat cooking skill and tidy self-upkeep. She gladly accepted him in her household and even taught him several recipes that were entirely new to him. Within a short while he became an expert in making toffees and bakery items like biscuits, bread, puddings, etc. He won a prize during a cooking competition held at the local Methodist parish church.

In the meanwhile he had not forgotten the main purpose for which he had come to Fort Scott. Definitely it was not to

become an expert cook. It was only a stopgap arrangement to spare him from hunger and cold. When he could collect enough money he left Mrs Payne's house and got enrolled in a nearby school. Those days he used to do a lot of works during his free time from school. At night, after finishing his lessons, he used to read books, old newspapers, booklets, pamphlets and almost anything printed in the dimness of candle light.

Georgie's efforts in education touched a new peak now. He used to collect learning materials from any available source. His thirst for knowledge prompted him to do any sort of hard work. Work and earn enough money and join a school. When the money gets over he would leave school and go for work. Once again when enough money was collected he would leave the work and join school. A lot of precious time had slipped through his fingers in this pattern of learning in the midst of an unending struggle for survival. He had thus a fractured childhood and a chequered educational career. Perhaps this was one of the reasons why he did not have many friends. Almost all the students were white and there existed an invisible chasm between him and them. It was not a suitable climate for any sort of friendship to flourish. Georgie who was already lonely would withdraw deeper into his shell in such circumstances.



Long since, Kansas was a free state. Yet, it sided with the Southern states during the civil war and so it was also considered a votary to the continuation of slavery. Minor racial scuffles happened there every now and then. Always it was the black that was hard hit. How could Georgie alone be free from the flames of this racial fire?

One day, books in hand, Georgie was appreciating the pictures displayed within the glass windows of a shop. Two white roughnecks faced him.

"Hey fellow! Whose are these books?" one of them blurted

out at Georgie.

"They are mine. I have purchased them from the school." They were quite piqued by this bold reply.

"When have they started admitting the Negroes in schools?"

"He must have stolen them," the other man said.

Georgie knew that the only way to escape humiliation was to run away. Instead, he decided to face the situation. If he ran away they would think that he had indeed stolen the books. The need of the hour was to justify his innocence rather than run to safety.

"Hey, fellow! Give the books here."

"These are mine."

Georgie's bold answer inflamed them. One of them snatched the books away from him and the other began to beat him. Then they went their way. None of the onlookers came to Georgie's aid.

Georgie was disturbed by the loss of his textbooks. He could not get a moment's sleep throughout the night. 'How to attend the school tomorrow? Once again, it's break in schooling. Now I have to earn money for books. That means to do more work. Until then, no school.'

Georgie's childhood was crushed under work load. Who was there to back him up? He had no one. Moreover, he did not like someone else's obligation. He had learnt what was self-reliance from an early childhood. Perhaps that was the bonus for being an orphan! Only those who can face challenges with determination can succeed in life. He learnt this truth the hard way early in life.



'Wilder House' was a well-run hotel in Fort Scot. As it was a transit point, all kinds of passengers like merchants, rangers, cattle brokers and labour contractors met there. Tri-weekly stage coaches from Kansas city drew up there with a great flourish

and discharged all kinds of passengers. Taking advantage of the considerably big crowd there, Georgie started a laundry behind the hotel. The travellers coming from far and wide encouraged this little 'enterprise'. Georgie was rather enthusiastic to find a means of his livelihood. He got engaged in cleaning and pressing the soiled clothes of the travel-sore customers. Within a short while this laundry grew into an attraction to 'Wilder House'. The owner of the hotel was very happy and gave Georgie a place behind the hotel for his stay.

The lady cook of the hotel arranged for him some minor works here and there. Georgie helped her in cleaning the kitchen stove, sweeping the floors, washing the utensils and even assisting her in cooking on busy days.

One day while serving him a meal, she said to him: "Son, you work hard. If you don't have at least a full meal a day you are sure to become weak."

Georgie was only thirteen then. As he could not reach his hands to the washing tub, he used to do the washing standing on a wooden stool. He used to wash and press clothes with the dedication and dexterity of an artist. It was soothing to see how he deftly replaced dirt with beauty. In his hands everything used to turn worthy, beautiful and sparkling. A touch with his long lean fingers would turn the earth into gold.

One day, a lady teacher noticed Georgie standing hesitantly at the gates of Fort School. She had seen before many a black student standing nervously like that but it was for the first time she saw such a poverty-stricken, lean and ill-dressed lad. She could not ignore him either as she recognized a thirst for knowledge in his sparkling eyes. When she called him near and made necessary queries on his background she found that his speech was impaired too. Due to an overflow of emotions his voice sounded cracked. She called him in.

The lady teacher was confused about the standard to which she could admit Georgie. His reading ability and spelling skill

was somewhat good but writing ability was below expectation. He was average in Maths but very poor in history and geography. What stunned her was his depth in botany and zoology. She could not help wondering when his answers gave her new insights into the world of nature. Without a second's thought she admitted the boy in her own class.

His dream to acquire knowledge spurred him forward. Teachers encouraged his reading habit by giving him books to read. He read newspapers and listened to the conversations of people in transit at 'Wilder House'.

Even then something strongly reminded him of Diamond Grove and the adjoining chain of Ozark Mountains. Living far away from his 'little friends' in time and space dejected him. At times he felt that it was unwise to have left Diamond Grove. Those were his severely agonizing moments. Could he go back now? At last he found a way out of this painful situation. He drew on available paper all those live images of all that which stirred his heart. They were trees, flowers, rabbits, squirrels and fast flowing streams. Then he drew their intimacy by sticking them in pages of books, on tabletop or on the walls.

One day in the Geography class, the teacher was dealing with the topic of hills and mountains. Georgie fell into a reverie and the Ozark mountain ranges loomed large on his mind's horizon. The pencil in his hand drifted and gradually there formed the outlines of a scenic mountain range. The teacher's shrill voice snapped him out of the trance. She then ordered him to show the notebook. Observing the neatly shaped sketch she was highly delighted.

"Where have you seen these mountains?"

"Ozark...." stammered Georgie.

"I too thought so. Oh how enchanting they are! You should see me as soon as the school leaves today."

Georgie met the teacher with a lot of hesitation. She scrutinized with fascination all the sketches that were with him

and said: "You must join the arts classes of Mrs Long. She will only be happy to teach a student of your calibre."

Before long, Georgie became a pupil of Mrs Long's arts classes. No one was as happy as Georgie during that Christmas season, for Mrs Long had gifted him a complete water-colour box.

Three years elapsed. Georgie went to higher classes.



The mid-summer vacation began. Number of travellers halting in 'Wilder House' began to swell. By listening to their conversations, a desire to see different places and different forms of the earth sprouted in his mind. This desire left him restless.

'The whole of creation belongs to God. I must have it's proper acquaintance,' Georgie decided firmly.

It was an era when America was expanding to the west. Hectic construction activities of major highways and bridges were underway. The railway companies were engaged in blazing new trails to the heartlands of the West. An army of workers was needed to materialize these ambitious projects. Georgie had earlier applied to a labour contractor for some suitable works during the summer holidays. Being under-aged for a labourer, he was taken in as a helper in the kitchen. He joined a team engaged in the construction of a railway from Kansas to Denver.

It was not easy to work in the sweltering summer heat. On hectic days when water had to be brought from far, Georgie remembered his old friends—raindrops and roses and bushes in bloom, fast-flowing streams and rivers in spate. Whenever he remembered them he became cheerful and the strain of sun heat became bearable. A clean sky by night with cool breeze amply made amends for a harsh sunny day. Moonlit nights exhilarated Georgie. He could save sufficient amount of money from this contract to enable him to continue his studies. All his dues were

collected and he left the company. Then he moved towards the west.

In his westward sojourn he worked at different places to eke out a modest living. He performed varied roles like that of a woodcutter, coolie, gutter-cleaner and the like. He even tried his hand at carpentry and blacksmith's skill. He acquired sufficient practice in collecting coal and kindling furnace with leaping flames.

Once while he was working in a blacksmith's forge, what he had seen outside rudely shocked him. The sky was getting dusky. Whites in small numbers trickled into the street and soon a small crowd was formed there. Trouble brew up when two or three 'enthusiastic' persons from among them came forward. They collected cinders of burning coal from the forge and quickly ignited a bonfire in the middle of the road. Thirsty tongues of orange flames leapt upwards licking the still evening air. Soon he saw the reprehensible sight of a black man being brought in shackles from the prison nearby. He was being kicked and beaten by any one who felt so. It was a free for all. Georgie had a gut feeling that something untoward was going to happen. He shuddered at the thought and his violent heart-beats almost choked him.

Breathlessly Georgie saw through the revengeful flames the pitiful face of the man who begged his tormenters for mercy with folded hands. Each time they were hell-bent on mercilessly pushing him into the midst of the bonfire. The whole scene was an entertainment for the little white crowd. Their women too watched this scene with excitement. They raised their children to their shoulders for a better view of this gala event! Should they too not have a right to watch the show? Then they pushed him to the fire. The blinking flames blurred and disfigured the pathetic face of the victim. The ghastly scene sank deep into Georgie's consciousness, deeply wounding it. Once again, Georgie had a chilling realization of what is the meaning of black skin.

Earlier whenever he saw his mirror image, he was never

disheartened. Now it was different.

'Are there not different hues in leaves, flowers and birds? Then what is wrong with people when some are black and some others are white? Is not colour difference merely skin deep?'

Definitely not. The meaning of dark skin is not that simple. It is very different here.

What numbed Georgie's heart more than the heart-renting cries of the victim for mercy was the orgy of the small crowd. The stench of burning flesh swirled his intestines. He felt like vomiting. He was afraid that his stomach would burst out in the ensuing convulsions.

'So this society is not going to allow manliness to go with dark skin. And it is now clear that if a black showed his strength he was surely inviting death.'

'Whose are the laws after all? Are not the judiciary a tool of the whites?' Many were the books and periodicals that openly declared with impunity: 'The Negro is a different breed. He is inferior to the white man. At any cost he must be kept down' ('Born To Rebel' by P. E. Mays/page 22). There never used to be even a murmur of dissent from any corner against such statements.

There were no facilities for a black to acquire knowledge. He had to keep in mind two things: One was to learn to remain away from the limelight by stepping aside from the path of progress, and the other was to keep himself alive.

'In this town where colour prejudice does its death dance, I too may be burned alive without any provocations. I must quit this place at the earliest...'

Georgie could not sleep even for a moment on that fateful night and before dawn he left the town.

Wherever he worked during this passover, he scanned the faces of grey haired black women. 'Would my mother look like any one of these? In that case how could we recognise each other?'

Now, Georgie turned towards Southern direction, to New

Mexico State. He joined a band of travellers heading for south. He was quite attracted by the vast variety of flora along the way. Some of the wild flowers that he saw for the first time delighted him. He engaged himself in collecting those wild flowers for hours on end. He gained vigour and vitality from the fresh air and hassle free life in New Mexico. Putting on strong muscles and a fleshy body Georgie was rapidly growing up.

Somewhere on that sandy land one day, he saw a rare wild flower quivering in evening breeze. He was carried away in sheer fascination. He sat there for some time admiring the flower. He tore carefully the paper bag he had brought with him to sketch that wild flower (nearly fifteen years later a drawing based on this sketch was awarded a citation in the World Columbian Exposition. What he saw there was a rare jungle flower called 'Yucca Angustifolia' belonging to the Cactus Indicus species).

When winter set in, Georgie got ready to return to Kansas as there were no suitable schools in that barren sandy lands full of thistles and cacti.

On his way back to Kansas, Georgie reached a village called Olathe. Though he had no plan to halt there, an advertisement on a hard board displayed in front of a saloon upset his plans. It said: 'Boy wanted for labour.'

'Good,' thought Georgie.

Perhaps this work could relieve Georgie of his food problem. One who doesn't have four walls of his own, can afford to live anywhere.

'Big Nat,' the owner of the saloon, liked Georgie's humility and confidence. He was instantly appointed. It was a Sunday and most shops were closed. So Georgie went for a bath in a nearby stream. He felt very hungry after swimming in fresh water. There were some hotels in the town; yet he went in search of a 'Blacks Only' hotel in order to avoid any unpleasant experience like in the past.

Georgie was stuck on his tracks at the bend of a by-lane as

he saw a small white-painted building with an elegantly kept up garden in its foreground. Like a sleepwalker he entered the garden and started crooning to the 'little friends' there. Seeing a little boy in her garden, the landlady Mrs Lucy Seymour came out and inquired about him. While responding, Georgie said that the hyacinth flowers there were not growing properly. He asked for a pair of scissors and trimmed the rose bushes tidily. While taking breakfast at her dining table, Georgie told Lucy, "I saw just now some good species of water lilies nearby. I am going to bring some of them and plant in the ponds here."

Lucy appreciated his dedication to work, hygienic habits and love for greenery. She believed that he had a good upbringing and gladly allowed him to stay in her house. Lucy Seymour had a simple but elegant life style. Her laundry was well known in the surroundings areas. The Seymour couple had no children. They profusely poured on Georgie all their pent up love. And Georgie was not a parasite either. He would sweep the house, it's courtyard and backyard in the mornings before going out. Besides these, he would find time enough to work in Nat's saloon in the evenings of weekdays and on full Saturdays. He would not waste a minute in idleness.

When the Seymour family migrated to Minneapolis, they took Georgie along with them. The schools there were of better standard. They made all possible arrangements for the continuation of his studies there. Lucy's laundry business flourished along with the township that was growing up. Gradually, Georgie had his hands full of works in Lucy's laundry itself. She shared with him some of her clues and tips for elegant washing and pressing. And he learnt them all with an innate skill of observation and experiment. Within a short while, he himself became an expert in washing and pressing clothes dexterously. No wonder Georgie, who learned anything with the zest of an artist, became an expert in laundry too!



In his quest for knowledge Georgie had drifted miles away from his moorings. In the meanwhile his elder brother Jim died of small pox. A ground swell of sorrow erupted in him whenever he remembered his big brother Jim. As they could no more walk hand-in-hand, Georgie felt that he had become a complete orphan. The tidal waves of slavery swept the two brothers ashore like wreckage. There was none to support and sustain them. In the wake of mounting desolation one of them melted in the hot sands and was drained to the eternal ocean of oblivion. The other one got up, turned his back to the sea, and walked towards the hill. High up. Away, far away from the sea.



Georgie continued his High School studies in Minneapolis. As the school records required names in full, he added the surname 'Carver' to his name. And he began to be known as Georgie Carver. There was also a white man in Minneapolis by the same name. The postman used to get confused while delivering letters. In order to help out the postman, the black Carver inserted 'w' in between the two names. Others filled this up as Georgie Washington Carver. Later, that was accepted on all records as his complete name. In a way Georgie was happy that his name was associated with great Georgie Washington! The white Carver was happy in getting his letters uninterrupted.

The school final examinations got over. He was yearning for Diamond Grove, uncle Moses and aunt Suzan and his mother's log-hut. The adjoining woodlands, the Ozark mountains, fast flowing streams in the valley and the blooming bushes were a few other things that had beckoned him to his roots. He longed for a loving smile from uncle Moses and a motherly pat from aunt Suzan when he would be laying bare secrets of his success. He wanted to be blessed by staying at least for a day in the log-hut sanctified by his mother's stay. 'Perhaps she might have returned home'. He wanted to dispel

his depressing orphan state forever.

As she knew Georgie's mind more than any one else, Lucy Seymour made all arrangements for his journey with a mother's care. Withdrawing some money from his paltry savings Georgie purchased presents for his foster parents.

As Georgie was travelling for the first time in his life by train, he did not know that he had to purchase tickets before boarding the train. So far he walked most of his journeys and had travelled very rarely on horse carts. He told the conductor frankly that he was travelling for the first time by train and that he was on his way to Diamond Grove in Missouri. The conductor wondered how a tiny boy could travel such a long distance all-alone. He was so impressed by Georgie's tone of assurance that he slashed the fare into half. Unexpectedly, Georgie saved some money that way.

The old Carver couple was happy to see Georgie. They welcomed him as would a long lost relative. Even the neighbours talked respectfully about his achievements and praised him for his determination and hard work. They were proud of their Georgie's thirst for knowledge. They came to know within a short while that his knowledge was not merely bookish but was based on observation. He taught aunt Suzan a number of recipes on condiments and toffees. He explained to them about various menu served in major city hotels. He shared with the women folk certain less expensive washing tips that would render clothes bright. He discussed with Moses on new methods of cultivation and how hay could safely be stacked for sparing use for a whole year. During his stay there he practically showed in Diamond Grove how by employing novel methods of cultivation one could enhance production.

This time too, Moses was impressed by his keen observation. He appreciated the fact that even in introducing new methods of cultivation the lad had applied scientific knowledge. And Moses patted his back with affection.

Almost all nights Georgie slept in his mother's wood-hut. Every morning he used to sweep the hut clean and dust his mother's spinning wheel, the only object that linked him with her. 'My mother might have spun baby clothes in it for me,' he mused emotionally.

Georgie narrated how aunt Maria and uncle Andy gave him succour and how they helped him to continue his education. Moses and Suzan heaved a sigh of relief. Moses gladly allowed Georgie to go by his horse cart while visiting Neosho.

Some ten years back Georgie had walked along the same dusty and jagged road in search of a school. Now it seemed only a short distance on a horse cart. And Neosho too looked dwarfed in comparison to many towns he had seen elsewhere.

Aunt Maria and uncle Andy wallowed themselves in a sentimental explosion at this re-union! Reminiscing and discussing past days and years they quickly burned out a day. When Georgie concluded narrating the saga of his trials and tribulations in the quest for knowledge they heaved a sigh of relief. It was evening and time for Georgie's return. Tears swelled in the eyes of the old couple and trickled down through the burrows of their wrinkled face. Maria said in a voice choked with emotion, "Son, learn more...nay much more...and then use that knowledge to uplift your downtrodden brethren." Georgie gave word to her that he would strive his best to redeem this pledge and left for Diamond Grove.

Summer ended and it was time to bid farewell to Diamond Grove as well. Georgie was getting ready to return to the unknown once again. Uncle Moses wished that he would stay in Diamond Grove. He opened his mind before Georgie, "Have you not studied enough? What advantage are you going to get by more studies? If you study any further, you will not be able to work hard."

Pacifying Moses Georgie said, "Uncle, Now my studies have only begun. So much task lies ahead of me. Only after studying

whatever my teachers can teach me, God almighty will reveal the secrets of nature to me. How many things are there to be done! However much work one does in God's earth, it will only be less."

Then, Suzan said with an air of finality:

"Let him go. There must be a lot of truth in what he says. God cannot go wrong."

Before leaving Diamond Grove, Georgie sought Moses' permission to take with him his mother's spinning wheel. That was readily granted. Carefully taking in hand his mother's only memento Georgie left Diamond Grove. Yet Moses and Suzan had the satisfaction in seeing Mary's infirm child growing up. All those who were there had their eyes filled, when bidding good-bye to Georgie.

'When will one see again this lowly and lonely youth seeking knowledge from pillar to post?'



END OF THE BEGINNING

Georgie passed school final examination with distinction and obtained in addition a colourful conduct certificate from the school authorities. As was planned earlier he eagerly applied to Highland University College in Kansas for admission. His joy knew no bounds, when he received a favourable reply from the college authorities. To top it all, the admission was under a scholarship scheme. Georgie bristled with excitement, as there was no need to worry about financial support. What remained now was to go ahead with higher studies in full steam. On a fine September morning of 1885 Georgie set out to Highland University that lies forty miles away in the north-west direction from Kansas.

What Georgie wanted to avoid at all cost had exactly happened there. Armed with the letter from the college, he entered the President's chamber with considerable apprehension. That was a large room with shining wooden furniture and wall-to-wall size shelves filled with large thick books. Georgie greeted the principal and placed the letter on his table awaiting a favourable response. The President cursorily glanced at the letter bearing his own signature and said coolly, "Sorry, there is some mistake here." That one sentence mowed down Georgie's dreams like prime blossoms by an unexpected storm.

'But. Sir...today's the date...your own letter sir.' The emotional disturbance heightened his stammer. Moments dragged on and Georgie was still more confused, '...His own

signature and then whose mistake, what he is talking about?

It was the mistake of his black complexion, the congenital mistake of the black race! He had attached with his application form certificates of merit and conduct from Minneapolis school authorities. What more does the principal need now?

Oh! Yes, all these certificates belong to a black student. That is the problem. How can the president understand a black's smothered dreams and his frustrations? He read annoyance in Georgie's eyes. To save his face he said, "It is not mentioned anywhere that you are a black."

"But sir, I have completely filled up all the queries given in the form." At the end the principal said, "We do not admit black students here. In my knowledge you are the first one who has applied so far."

When Georgie was about to step out of the office, the president who could not contain his curiosity called him back, "You have crossed the general standard of the blacks? Indeed it is praiseworthy, but what's the use of blacks studying? I think you are just wasting your time. Don't you think so?"

Holding his hand on the half opened door Georgie said, "God alone knows what will happen tomorrow. Who am I to predict my future? I only know that so far all my plans have gone well. I must study in college to fulfil my aims in life. I must get ready for that."

Now that his plans had run into rough weather, Georgie was dejected and circuted the town aimlessly. He saw vigorous signs of student life all around. There were enthusiastic youngsters, open book depots, busy hotels and ready-made garment shops. Everything wore a festive look.

He sighed deeply. Going back was out of question. He had to go ahead. How?

As soon as he had received the reply from the university he had let it known to everyone around and they also shared his joy. Nat had already publicized Georgie's success with his loud

mouth. Lucy did all that she could to help him on his way ahead. Whatever paltry savings he had collected from his hotel job as well as from the service with Nat had been spent in the admission process. There was hardly a cent in his purse.

The only option left in front of him now was to knock at the doors of households, in search of an odd job or two in order to keep himself afloat. He walked on dejectedly and spiralled out into the outskirts of the town limits. It was harvest time in the countryside.

Though the problem of education was pending, that of his daily bread was solved temporarily. He joined a band of workers in the field. The sickle kept the wolf at bay during the day and the stacked hay availed him rest by night.

The harvesting season ended and Georgie moved towards Iowa State. While on his way, he landed in a humble job in Shultz Hotel in the little town of Winterset. Those endless sojourns had chistled his personality. Georgie had a first hand experience of the miserable plight of his downtrodden brethren.

'How different is this big world from the secure serenity of Diamond Grove!' Here complexion had prominence. Everywhere his black complexion pulled and heckled his progress.



Drawing out of the shadow of a lean and hungry looking lad, the passage of last six months' time transformed Georgie into a six-foot tall youngster. He began to wear neat and tidy clothes. Georgie learned to mix with people a little more freely now. Even then his mind was chasing his 'little friends' in Diamond Grove.

God knows what prompted Georgie this time to go to church on his own. He remembered how some years ago in Neosho he had reluctantly gone to the church spurred by John Martin. Now, without any deliberation he went to a church on that Sunday. Since there was no 'Blacks only' church in Winterset he went to one for the whites. He occupied one of the back pews.

The service commenced. Waves of hymns aroused in him his childhood memories that swarmed around him like bees from a stirred hive. How melodiously did aunt Suzan and uncle Moses sing the hymns during nightly prayers! Instinctively he started singing. Only when the glare of the community fell on him that he woke up from his trance. In fact none but the choir positioned near the altar was engaged in singing. He had joined them. Georgie stopped short in embarrassment. An old lady standing behind encouraged him, "Go on singing my son, God has given you such a melodious voice!"

Georgie smiled at her in gratitude for the compliment. Then he pursed his lips. He freed his voice only when the community resumed singing. And then, his pure and rich voice reverberated the vast interior of the church. After the ceremonies were over many people came forward to compliment him.

The pastor enquired about his whereabouts. This chance acquaintance with the pastor and other people opened the gates of fresh opportunities for him. He began to attend church regularly to savour the elevating hymns. He was adept at singing the lilting tenor, when the community usually ends the chorus. These were quite ecstatic moments for him to cherish.

While working in the hotel one day, Georgie got a message through a colleague that a certain white gentleman had come to see him. He washed his hands quickly and came out. He got confused when he saw the visitor.

"Hello! I'm Millholland," the visitor introduced himself. "I got your address from the pastor. The purpose of my visit is to meet you."

"Thanks," hesitantly Georgie replied.

"This is the kitchen of the hotel and is just not the right place for a gentleman like you."

"Never mind. My wife came to know that you live here alone. We thought of inviting you home once. Just for a chat."

"Oh!" It was for the first time that some one had invited

him home. Georgie did not even know how to respond on such occasions. He tried to say something, but words failed to co-operate with him.

"My wife is the leader of the church choir. She used to listen to your singing in the church. She is a good musician and has had training abroad. If she hears a voice even for once, she can judge its quality well."

"What you are saying is... O God! ...I ... this is too much."

"Why have you stopped? What I say is that my wife likes your voice. In her opinion you have a very rich voice."

"Oh, I can't just believe this. Is my voice that good? I had been dumb from childhood. Even now I stammer."

"Then I appreciate you all the more. Tell me when you can visit our house."

The date for his visit was fixed. After Mr Millholland left Georgie thought how nice a person he was.

"Those who can study outside must be quite rich. Isn't it? Yet they come to invite a poor man like me." Georgie felt like crying. 'Says that my voice is quite good...melodious.'

The day of Georgie's visit dawned upon a pleasant Winterset sky. Elaborate preparations had already begun on the previous day. Carbon dust collected from the hearth was mixed with pork-oil to polish his shoes till they sparkled. His dress was finely washed and pressed. He cleansed his hands repeatedly. In spite of all these preparations there still remained in Georgie a sense of imperfection and mild apprehension when he was on his way to meet the Millhollands.

Georgie was stuck at the sight of a freshly bloomed jungle flower in the by-lane that turned towards the Millholland House. It fluttered and danced in the breeze and looked as if beckoning him to share its joy of a glorious existence. He held the flower in his cupped palms and appreciated it. Then he carefully plucked and softly studded it on his shirt's button hole. With great satisfaction, he went ahead to the Millhollands.

Mr Millholland was waiting for Georgie at the sit-out. He warmly welcomed him and went inside to call his wife. Georgie was a little disappointed to see the sparse and simple furnishings of the living room. Others would have displayed more extravagance in such a hall!

'Can this be called a living room? This is really empty,' Georgie was a little disappointed.

"Oh! What's that?"

Georgie saw a curious piece of furniture in a corner of the room. It was an old piano. He had only seen one in pictures. He gingered towards the instrument and then his nimble fingers danced on its keyboard.

Hearing footfalls behind, Georgie looked back in embarrassment, "Oh! Don't stop. Play on. How nicely do your fingers lend support to your voice? You are a born artist." It was the soft voice of Mrs Millholland. Georgie turned back and looked at her. She is not lavishly dressed up like other rich women. Once again it was disappointment. She led him to the chair nearby and said, "Here, let me show you how to play the piano."

Mrs Millholland's trained fingers softly ran along the keyboard. Soon the room was filled with an enchanting sound of music. It lightly touched his heartstrings and for a moment Georgie felt that his 'little friends' were dancing in front of him. The Ozark high ranges magically beckoned him. He had been swimming and sinking in a medley of memories. The rich and sonorous voice of Mr Jaegar rang out in his ears, 'This earth belongs to the Lord. Lift up your heart.'

Georgie felt that he had terribly missed something along the way. An inexplicable agony overwhelmed him. He covered his face with both the hands. Tears that flowed through his cheeks trickled along the fingers. Silence filled the large room and for a moment everything was still.

Mrs Millholland softly touched Georgie's shoulders and said

kindly, "I am sorry friend. Indeed sorry."

"It...it was very beautiful," he couldn't say anything further and remained tight-lipped. She said, "I understand everything now. I should have thought of this much earlier."

Georgie felt that he was in the midst of people who could see everything with open eyes. This thought breezed into Georgie a whiff of confidence and his diffidence vanished. And fresh rays of hope were refilled therein. He felt a fresh urge from resources within telling him to go ahead...

Georgie shared with the Millhollands the sad saga of his life. In between he narrated to them the bitter experience that he underwent when he sought admission in the Highland University. Never before had he availed an opportunity to open up before some one so frankly. And no one ever heard him so intently.

The Millhollands seriously took his desire to study in a college and promised to help him. In the evening while parting he told them that he would return on the following day with some of his paintings.

Mrs Millholland said, "God has given us spare time so that we should create something. As long as you are here come and learn musical lessons from me."

"Oh definitely. I would only love it. Allow me in return to prepare a garden in front of the house." It was a sort of contract.

Spring arrived. And that spring was one of the happiest in his life. He used to spend all his free time availed from hotel work, to lay out a garden in front of the Millholland house. He was seen regularly digging, planting, and tending the garden. During the remaining time, he learnt musical lessons from Mrs Millholland.

Georgie's garden was blooming and his fingers were playing elegantly on the piano keys. Mrs Millholland's expectation that he would learn piano lessons effortlessly was not belied. One of Georgie's paintings now adorned the parlour walls of the

Millholland house. Their guests were full of admiration for the painting but no one could believe that the black boy who sang tenor in the church choir drew it.

Georgie became a regular visitor to the Millholland house. Each evening he narrated his experiences to them in detail. "Can you do half this work?" Mrs Millholland would ask her children who had to compulsorily attend these 'model lessons' by Georgie.



Seeing the various works done skillfully in the Millholland house, their neighbours offered Georgie lot more works. Everyone knew well that once Georgie was entrusted with a work it was as good as done. Mrs Robbins was a neighbour of the Millholland household. One day Georgie showed her his collection of knitting works.

"What are you going to do with such a lavish collection?"

"I want to teach my brethren when I get back to my village."

'Any skill that is handy should be learnt.' That was Georgie's attitude from childhood. 'As long as there are people like the Millhollands about me, I would never feel alone.' This feeling gave him enough strength to face the challenges of life.



It was a sweltering day during the summer vacation. Georgie was engaged in the garden at the backyard of the Millholland house. Mrs Millholland called him to be introduced to her nephew Dan Brown. Georgie was in fact a little annoyed by the interruption of the work that he was engaged in. Since his aunt had already briefed Dan about Georgie, he had come collecting very useful information regarding Georgie's further education.

Mrs Millholland said, "Look here Georgie, Dan has brought some good news for you." Hearing this, Georgie sank down on

the topmost doorstep. When he saw the glitter in Mrs Millholland's eyes, his mind fluttered with expectation. Dan was intensely looking at his well shaped head, bright face and searching eyes. 'Woh! This is different sort of a black boy!'

Without testing Georgie any further Dan told him what the good news was. "Every one here says that you are very eager to study in college. I feel that Simpson College is most suitable for your further studies."

"What! Simpson College? Why have I not heard about it before? Where is it? Will they give me admission there? What do you feel?"

"Wo! What a breathless barrage man! Now listen. This college is situated in a place called Indianola, in Iowa State. Bishop Mathew Simpson who was the right hand of Abraham Lincoln in fighting slavery established it. All his life he fought against slavery. He had sacrificed a lot in the establishment of this college. Because of all these and more I think you will have no difficulty in getting admission there. I too study there. The fees quite affordable. Since the town is well developed you can obviously get some works too. Do you need any further information now?"

"Are there other black students?" bitter experience compelled Georgie to ask. "No, so far there's no one to my knowledge but I am sure that it won't be a problem. Bishop Simpson fought life-long for the black cause. Do you think his ghost would leave the present authorities there in peace if they do something against that cause?"

Georgie got up in a hurry and filled his lungs with fresh air. He had been trying to offload a weight that he had been carrying in his mind for a long time. At last the door was opened.

"I have heard that the Arts section there is very good. In that case Georgie can earn more proficiency in Arts subjects. I'm sure that Georgie has a tremendous interest in painting and music."

"That's all right. His talent in painting is excellent, but what I think is..."

"Dan, openly tell your mind," Mrs Millholland said with evident qualms. "I don't know how to express it, but see aunt, if there is any substance in what I say," Dan continued.

"Look, I have been coming here for the last several years and the gardens in front as well as at the backyard of this house were never the same. How different do they look now? This spring is different here. This young man's creative hands are not meant for merely imitating and reproducing nature on canvas. They are meant for creation. It is nice to know how to play the piano and paint occasionally. That's all what I have to say." Georgie smiled approvingly.



It was indeed difficult for Georgie to leap into the unknown once again renouncing the belatedly availed family warmth in the Millholland household. Who knows whether the experience that he had in the Highland University College, would not be repeated elsewhere? Yet, he controlled his apprehensions and prepared for his onward journey.

After tramping almost thirty miles Georgie clambered on the steps of Simpson College in one blue morning, two days ahead of the re-opening. His constant companions, poverty and a burning desire for knowledge, accompanied him there too!



Now, each dawn had a new meaning for Georgie. Incredibly, the process of college admission there, happened quite smoothly. He got lodging facility without boarding. Since he got some odd jobs here and there, the initial days could somehow be managed. Tightening his belt, he saved a paltry amount from his meager earnings. Using up that money, he purchased a washing tub, a wooden plank, and other accessories for a laundry. With the

principal's permission, he opened a laundry in the campus in a wooden shed that was lying vacant. Dan Brown did a lavish advertisement campaign for the new 'venture'. Within a short while, this laundry became a center of attraction as well as a 'posh joint' of the students in the campus. In spite of all such encouragements Georgie had to face bitter deprivation in the initial days. One can surmise this from the letters he had sent to the Millhollands during this period. Once Georgie wrote: "On many days I existed on animal fat and prayer. Some days only on prayer." Anyone, who visited the laundry, could see activities of washing, pressing and reading going on simultaneously. Darning of trousers, stitching of buttonholes, and fixing buttons, repairing of socks and the like were the several works he did skillfully and enthusiastically in those days.

While Georgie was functioning in the laundry, there used to be competition among the students to occupy the positions in front of the laundry. Even while hectically engaged in work, Georgie used to narrate his experiences with the proficiency of a mimicry artist. And very often his narration would set off explosions of laughter. Students liked his laundry for this reason and his 'business' flourished. Within a short while Georgie began to be known around as a multifarious genius and a bright student.

Soon Georgie started to learn painting, under Ms E. M. Bud who headed the Arts Faculty. It didn't take much time for her to recognize that his fingers had remarkable agility to paint. One evening she spoke about Georgie to Mrs Liston, her friend, "He is a highly talented youngster. If there's some one to support him he can become in no time an excellent artist. I had been observing him for the last several days. He does not accept any favour from any one without doing something in return. I paid his fees this time and for the last four days he had been chipping firewood in my house. His needs are many. I'm afraid that if he has to struggle for his basic necessities like this his

talents would wither away before they blossom. Can you do something for this boy?"

Mrs Liston was ready in a jiffy. In no time she collected some furniture like a table, chair, cot, etc. from her friends. In this task she enlisted the support of a few other students as well. Since Georgie was not a guy who accepted favours freely, they tried to help him indirectly, like dropping a half dollar coin or a free ticket for programmes through the door-slot. Though he could not outrightly refuse any such favours, hardly was it known to any one, that he was enormously grateful to his benefactors. Georgie's indebtedness to Simpson College was amply clear from the letter he once wrote to Mrs Millholland, "My ardent desire to live like an ordinary person, enjoying his rights and duties, was made possible by Simpson College. For the first time, I began to live here like a human being. All these have now enhanced my self-confidence."

□

Georgie completed three years training in drawing and painting under Ms Bud. Some of his creations of this period, were kept in the department for a model to the students there (almost twenty-seven pieces out of those paintings are preserved in the 'Carver Arts Collections' today).

In addition to drawing and painting, he practised music. In those days, he participated in several functions in the college lending his melodious voice. He won several citations during these programmes. More than all the accolades, what gave happiness to Georgie, was the realisation that his stammer had considerably been reduced and his speech improved.

Even after acquiring commendable proficiency in Arts, there remained an inexplicable sense of loss gnawing at Georgie's being. He felt like something valuable had been slipping through his fingers. 'Is not mere imitation of flowers and trees and drawing their pictures, like flaying at the face of nature? Does it not

amount to making a caricature of the reality of creation? How could I continue doing the same for the rest of my life?"

In order to calm down his restless spirit he began to spend more time in the laboratory from the following academic year. Before long his professors said, "Your education here is complete. We have nothing more to offer you now." In fact Ms Bud, his Arts professor, advised him often, "It would be very fine if you can go to Paris for advanced training in painting."

Even his own inner stirrings prompted him to go for a life with Arts. Yet, whenever he looked at his long lean fingers it reminded him of Mr Jaegar's words, "These are creative fingers. They can stir life."

'Stirring life does not mean imitating and reducing it into lines and strokes on canvas. I should definitely do something different.'

Georgie said goodbye to Simpson College in the year 1891 and got admission in Iowa State College in Ames, which was well known for botany and agro-chemistry. Ms Bud's father who was a professor there made this easy.

□

Georgie was now running twenty-seven. There was enough drive and energy on his tall muscular frame. Since he had enough money for both tuitions and hostel fees everything seemed to go well except a minor hitch that was created by the stubborn stand of the warden that he wouldn't give admission to any black student in the hostel boarding and mess.

Mr James Wilson, who later adorned the high rank of the US Secretary of State and Cabinet Member, was working in Iowa State College as director of the 'United States Experimental Station'. When he heard about the plight of this black youth he called him to his office and said quite formally.

"Georgie, you can very well stay in my office."

Thus by rearranging the office furniture, he found enough

room to accommodate a cot for Georgie. When the cot was being brought in through the narrow door, a few scratches marred the polished frame and shutters by chance. Georgie was looking for an opportunity to rectify the same. He used to gratefully return even a small favour in some way possible. It may be either by tending to the benefactor's garden, painting his house or by giving him his best knitting samples. What a tremendous sense of gratitude that spanned all the three tenses of existence!

He asked Prof. Wilson, "Is there an Arts section in the college campus?" Wilson's answer was a counter question, "What do you mean by Arts section? Do you think that this is an Arts College?" Georgie went on, "What's wrong to have an Arts section in every college? How can the students see otherwise God-given colours? I will establish one day such a place where students come on their own having been attracted by colours."

Prof. Wilson glanced at him in admiration and thought, 'What an extraordinary student's here! I'm sure that he has already chartered out his future course of action.'

Prof. Wilson and Georgie remained friends throughout the rest of their lives. Wilson never ceased to marvel at Georgie's achievements. With determination, Georgie remained awake throughout the night and completely painted those doors and frames. He also polished the furniture. Once the problem of residence had been taken care of, what remained was the food problem. Georgie was not yet lucky to eat in the common mess chit-chatting with his classmates. He had been given a place in the corner of the kitchen at the basement. He agreed to this sort of a humiliating arrangement, only very reluctantly. As a rumour of this reached the ears of Ms Bud, she quickly delegated Mrs Liston to Ames with a letter to her father Prof. Bud, as she herself could not come due to the Semester Examinations. After Mrs Liston's visit to Ames, the problem with the 'mess' was solved and Georgie got justice. From the following day, he began to eat with his friends in the mess.

Within a week, Georgie altered the cut and style of the dining hall. His depth of knowledge and humble deportment endeared him to everyone and soon the little world there began to revolve around him. A game introduced by Georgie then, continues to be played in the mess even today. The same has come to be institutionalised in the mess. If any student wanted a particular item of food, then he had to ask the same using its scientific term. Suppose, a student wanted sugar, then he had to ask for 'C12H22O11'. If what someone else wanted was potato, then the term would be 'solanum tuberosum.'

Naturally, the novices used to get into trouble due to their non-proficiency in the scientific terms. Therefore, they would compete with one another to occupy the seats near Georgie. Naturally, they wanted to spare themselves of compulsory fasting. Who did not know that Georgie was a living encyclopaedia of scientific terms?

Georgie studied subjects like Botany, Geology, Chemistry, and Biology in the new college. He had an extraordinary liking for Chemistry because satisfactory answers to many of his questions as to the 'why' of things could easily be found in this subject. Georgie's interest in the study of Chemistry reinforced his habit of deeper search in any topic that he undertook to study.

In between the struggle to keep up his physical existence and maintain his habit of disciplined studies, he found some time to respond to the muses' call in him. In order to express his natural talents, he used to take part in a lot of cultural programmes in the college. Once while taking part in a musical festival in the college, he sang a tender number. One of the judges present there was the director of the 'Boston Conservatory of Music'. Georgie's melodious and rhythmical performance impressed him so much that he promised him a scholarship in music.

Georgie's aspiration was not to become a musician. He did

not want to divert his commitment away from his cherished mission in life. He politely declined the offer. Now, Georgie had completely won over the stammer that had been troubling him from childhood.



There was a Para-military unit attached to Iowa State College that gave the students military training. Georgie got enrolled himself there even though he had no flair for military service. Besides, being a black, it was not easy for him to be an officer of the corps. Yet, his liking for the uniform and musical march past prompted him to apply for selection.

Georgie had a slight hump on his back as a result of his continuously bending for years while washing clothes. He looked like carrying some load on his back while walking. Even the commanding officer of the Para-military force had often scolded him for his walking style. Georgie found a way out. He would keep a sufficiently long wooden staff under his armpits from behind his back. Then he used to walk two or three miles in that posture. If he saw a plant variety or a strange stone specimen on the way, he would only kneel down to examine them without disturbing the same posture. He never tried to collect them if it involved bending down.

At the end of the training, Georgie availed the coveted rank of Captain. This was a rare achievement for any student. The fact that the first black student of Iowa State College had won the same, makes it a rarer news. General Lincoln, the trainer of the corps, was a strict disciplinarian. Congratulating Georgie for this rare honour he said, "This diligent and worthy student has achieved the record only by his determination and hard work. None but himself can claim the credit for this success."



Georgie's inner urge for painting and music used to disturb him time and again. During the academic break between semesters, he learned with Ms Bud some advanced lessons in painting. It was during these days that he gave finishing touches to the 'Yucca flower' that he had seen in the sandy lands of New Mexico and had drawn sketches on.

Somehow Prof. Wilson got wind of Georgie's proficiency in painting. It was Prof. Bud who brought this to his attention and his admiration in turn was born out of his daughter Ms Bud's opinion of Georgie. Yet, Prof. Wilson could not fathom why Georgie was running after Agricultural Sciences after neglecting such an inborn talent in him for painting.

At last he asked Georgie one day, "Why can't you take a few months off from the college and complete your higher studies in music and painting?" Georgie replied very politely, "Studies in Agricultural Sciences would benefit my brethren."

Prof. Wilson was stumped by this reply. He was immensely impressed by his student's grasp of reality as well as his sense of his future mission. Prof. Wilson's admiration for Georgie increased with each passing day.

Everyone knew that Georgie did not accept any favour without giving something in return. Yet he had to obey often Prof. Wilson's orders unquestioningly. Once, when he saw that Georgie was wearing a pair of worn out shoes, Prof. Wilson gave a two-dollar coin to him and said, "Georgie, now go and buy a new pair of shoes. Be quick...quick." Georgie went out without any protest.



An 'All Iowa Arts Exhibition' was to be held in Cedar Rapids that year. Prof. Bud talked with Georgie about sending some of his paintings for the exhibition. Georgie expressed his helplessness, "I have no means to go to Cedar Rapids and take part in the competition."

How could Georgie's classmates keep quite? Some of them went to Georgie's room. They forcibly brought a disappointed Georgie out and seated him on a horse cart.

"Hey, tell where you are taking me," Georgie protested.

"Christmas has come near pal. Come along with us."

"Why can't you say where you are taking me? Please let me get down. I have work to do." Who was in a mood to listen to Georgie's protestations?

"Don't make a scene friend, we know how busy you are."

Now, Georgie had no way to escape and he sat there quietly. Then they began to move forward to the town singing Christmas Carols. Students trickled in small numbers and joined them along the way. There was an orgy of music and Georgie's patience was wearing thin. The passers-by had no hang of what was going on. At last the procession ended in front of a large ready-made garment showroom.

"Georgie, come out please. Won't you?"

"Why have you brought me in front of this shop? Look at me. How awful do I look! Will anyone allow me in?"

"First you come out friend. Then we will listen to your sermon."

They had literally lifted Georgie and went inside the shop. The owner had prior intimation and everything went ahead as planned.

"Try this," picking up a grey shaded suit that matched Georgie's complexion, the owner said.

Georgie protested, "These antics are too much. I am not going to buy these clothes."

No one waited for Georgie's permission. While those friends who entered the shop were trying forcibly to put the suit on Georgie, others outside were creating an orgy of singing songs. When they found the suit was fit for Georgie they chose a matching shirt, tie, gloves, a pair of shoes and a hat. When Georgie was fully dressed up there was a great applause. He was

seated again on the cart and they resumed singing.

The return procession halted at the gates of Prof. Wilson's villa. Prof. Bud too was there to welcome them. Georgie now understood that they were all part of this 'conspiracy'! "Sir, while I was going to the botanical garden...they...don't you see what's going on?" Georgie pleaded.

"Oh, yes." Prof. Wilson brushed aside the complaint.

"I had agreed to clean Prof. Brady's house today."

Prof. Wilson paid no heed to this and said, "Georgie, today you are going to Cedar Rapids." All the students applauded in approval.

"Georgie, who is here worthier than you to take part in this competition representing our college? This ticket is for Cedar Rapids. These are the drawings selected by Prof. Bud as per the recommendation of his daughter Ms Bud. Prof. Brady has given his permission quite generously."

"How can I repay all these?" Georgie asked them earnestly.

Prof. Wilson said with an air of finality, "You have already returned these favours and more. Look here, your collegemates and teachers collected some money now for this purpose and that is not a big deal. None of these gestures will suffice to compensate your friendship. Now you go and get ready for the journey. Best of luck." Tears welled up in Georgie's eyes. Inconsolably he wept saying, "What do I have to repay this affection of yours?"

□

What made Georgie endearing to his classmates was his qualities of self-reliance and depth of character. The trust invested in him by the State College was not belied. All the four paintings exhibited in the competition were awarded prizes. Moreover, his nature sketch 'Yucca in Mexico' was short listed for presentation in the forthcoming World Columbian Exposition in Chicago.

Paintings from many famous artists were exhibited in the World Columbian Exposition. Yet the drawing on the rare desert flower 'Yucca in Mexico' was awarded a special prize. All the newspapers published from Iowa State had made a reverential mention of this painting as well as its artist. More than any other plaudits he had received elsewhere, Georgie derived satisfaction from a small get-together in the corridor of Prof. Wilson's villa.



Georgie's childhood experiences had forged in him habits quite different from other youngsters. Early dawn, while his companions were in deep slumber, Georgie would have reached some distant woods or fields for a morning stroll. He used to derive knowledge about nature directly, while his classmates had to depend on books for the same. No wonder Georgie was much ahead of them in studies.

By this time, Georgie became Prof. Wilson's right hand. Days and nights were not sufficient to finish his works. Georgie spent the whole of the summer holidays in the supervision of the botanical garden. He too liked this responsibility. Even after such works, Georgie found enough time to roam about the woods nearby.

Dense woods that had innumerable wetlands and marshy ponds with sifting sands surrounded Ames. Some of them were deep enough for a man's height and even an animal could have easily drowned in it. Georgie had made detailed discussions with Prof. Wilson regarding these treacherous marshlands and had prepared a project report on how to drain them out.

One day while Georgie was walking by the marshy woods slinging a kit on his shoulders and a magnifying glass in hand, he saw to his surprise a boy playing fearlessly in one of those dangerous ponds. Georgie called out to him to climb up. What happened was just the opposite. The boy fell down into

the pond instead. Georgie sprinted toward the pond side and lifted him up. While wiping his dirt with his handkerchief Georgie asked: "Boy, why did you destroy the dwellings of these little creatures?"

"Dwellings? Did I destroy? What kind of creatures?"

The boy did not understand a word of what Georgie had said. Seeing his dismay and distress, Georgie explained about the creatures and showed their dwellings in the burrows of the marshes.

"Oh really ! Were it not their dwellings that I had been destroying all this while?"

The boy's eyes swelled with tears in contrition. Then Georgie caught a butterfly and showed it to him. When the boy expressed his desire to possess the butterfly, Georgie freed it and explained the reason for that too. Then Georgie asked his name.

The boy answered, "Henry Wallace." He was destined to adorn one day the exalted position of Vice-President of the United States of America (1940-1944).

"So you are the son of Prof. Wallace?"

"Yes."

On the following evening, little Henry waited for Georgie in the botanical gardens. He had his mother's permission to stroll about the woods together with Georgie. He showed little Henry a rose bush that was regularly tended by him. When he saw red and yellow flowers in bloom on the same bush, little Henry gaped in wonderment. Then, Georgie explained in simple language how plants are grafted, "If the growth of a plant is found stunted, the bud of another plant of the same kind that grows robustly in that environment, would be grafted to the original plant. That would enhance it's quality and growth."

These 'friends' began to walk hand-in-hand by the woodlands on evenings. Georgie gradually introduced little Henry to the mysteries of nature. He learned more about grafting plants from that tender age.

The friendship between them lasted until the last breath of Georgie spanning a period of a little more than half a century. They filled in the gap of mutual absence by inspiring correspondence. In many matters Wallace sought the advice of Prof. Georgie in later years. Though it was the dedication of Mr Henry Wallace that made the 'Wallace Farm' a reality in the Mid-west, Prof. Georgie provided the inspiration behind it. After becoming the Secretary of Agriculture and then later the Vice President, once while recalling his childhood experiences Henry said:

I used to listen to Prof. Georgie Carver on the miracles that were unfolding in nature every moment as if I were listening to fairy tales! He gave me 'eyes' to look at nature closely. I don't claim that I had understood them fully well at that time. I can say one thing for sure that I am grateful to him for he showered upon a boy like me the drizzle of his knowledge. He trusted me amply well.

There was a group of students whom Georgie could not avoid and later gave up. One day he saw a young student grimacing with pain. He was turning and twisting about his bed. Georgie went in and inquired about the reason for the pain. The student was a football player. While playing, he got his foot sprained and then it was swollen. Georgie asked the student to lie prone on his bed. Then he began to run his long lean fingers from the ankles to the hipbone of the young man. The painful sprain, that gave him convulsions, soon began to subside and the player had a sound sleep in the night. On the following day all students were wonderstruck to see the player completely relieved.

This was enough for the news to spread in the campus like wild fire. Thereafter Georgie became the authorized masseur of players. They became Georgie's 'admirers' in no time. 'It's difficult to say what magic is there in Georgie's

fingers.' 'As soon as those long lean fingers touch the sprained part, the pain disappears.' A long list of eulogies began doing the rounds in the campus.

Due to higher viscosity, the oil used for massaging the jabbed muscles of the players was not smoothly spreading and giving the desired effect. When Georgie brought this to the notice of the physical instructor he replied that there was no better oil available. Then Georgie said, "If so, some day I will prepare a highly refined oil for maximum effectiveness."

After few years, Georgie Carver succeeded in preparing a high quality oil from groundnut.



In the year 1894, Georgie had completed his graduation in science from Iowa State College. The convocation ceremony was the recognition of his hard work. Mrs Liston came from Indianola to attend the function. Ms Bud and his Simpson College friends sent presents and bouquets with her. Georgie's eyes swelled with gratitude to this outpouring of affection by his old friends. The thought that there are at least a few kindred souls in this large world to share his happiness on his success encouraged him. He took a fresh flower from one of the bouquets and fixed it on the lapel of his coat. During the rest of his life that slot never remained vacant in the absence of a flower. Always a fresh flower resplendently nestled there as a memento of the camaraderie he had experienced on the convocation day. One has to learn from Georgie how to cherish a symbol of love!

Within a short span that followed, Georgie made giant strides in his career. Some of his drawings had been selected for the World Colombian Exposition in 1893. He began to be known as a highly talented young man of Iowa. Further, he became the first black officer of the United States Officers' Reserve.

When Georgie stepped on the dais to receive his scroll of

honour, the applause of his friends and their parents deafened the convocation hall. When he received this rare recognition, he experienced an untold ecstasy and a sense of fulfilment. After the function was over, he came back to his room. Behind closed doors he knelt before the spinning wheel of his mother and drowned in her sad memories.

'Oh...if my mother were with me! She would have been mad with joy and would have kissed me forgetting herself.'

This was a crucial moment when he acutely felt his irreversible orphan-state.

'Where must be my mother now?'

It was difficult to say how long he had remained there engrossed in the memories of his mother. The Millhollands, Prof. Bud, Ms Bud, Mrs Liston, the Martins and Prof. Wilson—the list of those who played their respective roles in this unique achievement goes on. Each one of them helped Georgie according to each one's capacity. Knowingly or unknowingly they were instrumental in shaping his personality. Georgie remembered them with gratitude.

It was getting dark. Prof. Wilson came searching for Georgie. He was unaware of all this. Prof. Wilson pushed the door gently and waited. He could sense where in the room Georgie could be. He knew what would be Georgie's feelings. He made his presence felt. Georgie lit a lamp and came to the door. Prof. Wilson asked, "Why do you remain here all alone? My wife has invited you for dinner tonight. Don't you want to hear the good news? You are selected as a member of the Faculty of Science."

The lamp fell down from Georgie's shaky hand. It broke into pieces. Prof. Wilson sensed Georgie's state of mind. He too was becoming emotional. He said, "Let it remain. Don't be upset."

"What! What have you told me just now?" Georgie's voice cracked.

Then Prof. Wilson said categorically, "What you've heard

is perfectly true. You are appointed from today as a faculty member. You can hereafter start teaching botany in the college and supervise your dear botanical gardens."

Georgie could not believe his ears. This was a rare honour for any student whether white or black? Becoming a faculty member of Iowa State College was not a mean achievement.

'The horizon was expanding. This whole earth belongs to the Lord. To deserve the earth one has to cross the horizon.'



Before long, Georgie started research under Prof. Wallace. It was a presage to the agricultural revolution that was to be unfolded in the near future. The days when soil, vegetation and mankind would co-exist were at hand. Prof. Wallace cautioned his brilliant student, "As long as the layer of topsoil is safe, the future of the nation too is safe."

Then on, this master-disciple two-some began their crusade to save the topsoil on earth's crust.

Georgie chose 'Mycology' or 'Fungi Studies' as his subject for post-graduation. It was under Prof. Pamel that he continued his research. For his mycology studies Georgie had collected roughly about twenty thousand samples of plants and fungi. Georgie's fame for his deep knowledge began to spread far and wide. Scientific journals recognized patents for the authentic and original studies conducted by him. Acceptability for Georgie's original research findings is evident from the fact, that it was from Georgie Carver, that once Prof. Bud quoted for authenticity in one of his articles published in the Iowa State Register.

Georgie left no stone unturned to deserve his master's confidence. He criss-crossed villages of Iowa State, campaigning to create awareness among the villagers on various fungi that affected plants. The language he used was so simple that even the illiterate villagers could easily understand.

The stammering boy of Diamond Grove had now grown tall and capable of disseminating knowledge to the villagers of Iowa!

Georgie obtained M. S., the highest degree in Agricultural and Bacterial Botany in 1896. This was the end of a beginning!



FREEDOM STRICKEN

Slavery had been abolished in the United States of America by the Emancipation Proclamation of December 1865, which laid the official stamp on black liberation. A whole generation of illiterate and helpless black population was now free constitutionally, on paper.

Those who were slaves till a day before had no other meaning for life except to obey orders and work in seamless cotton plantations. They were born in slavery that had lasted two and a half centuries and had been brought up in oppression. How could one expect them to become all of a sudden capable of enjoying the unexpectedly gained freedom? For a forty-lakh strong black population, this newly dawned freedom created more problems than possibilities.

It was not easy for them to ensure the fulfilment of their basic necessities of life—food, clothing and housing. No one so far had taught them to plan for the future. Their owners could sell or purchase them in the market at their whims and fancies till a day before. Neither a family set up nor an institution of marriage existed amongst them. Their masters separately owned their women folk, making a permanent family set up practically impossible. It was no wonder that the newly found freedom had brought a whole generation of blacks to the streets.

The condition of the newly freed blacks was similar to that of a patient whose operation had been successful, but there was no one to take charge of the post-operational care.

Constitutionally they were free to live at par with the whites. Yet in reality they had to try to cross the wide gap that existed between them and the whites.

These newly freed people had to face a number of problems—needs of shelter, education, a proper institution of marriage, upward mobility and the like. They knew nothing apart from cotton picking. They had no land of their own. No education. No gainful employment. Some of them were in their seventies and eighties. They had never left their farms. Where could they go in the evening of their lives?

The newly freed blacks had not really grasped what was meant by freedom. A vast majority of them went back to their former masters. The painful irony that underlined the situation was that they had to pawn their newly availed freedom for half a bowl of gruel!

A good number of them considered concepts of freedom, education, etc. was only the means of escaping from hard work. Accordingly many of them turned their faces away from hard work and eked out a humiliating living. Speaking Latin or Greek impressively and learning trades like commerce, banking or the like were considered signs of greatness by many of them. Since the newly freed black society got entangled in politics, much before they became self-reliant, their socio-economic progress got stunted from the beginning.

The 'cotton barons' traditionally held political sway over the Southern States. Endlessly vast plantations in the South depended on the free labour of the blacks. Gradually the Southern culture got embedded in the system of slavery. Ironically, the Southern whites quoted the Biblical references to slavery that existed in ancient Egypt and Greece as lame justifications to bolster the continuation of the evil system in America. The cotton mills of the Northern States depended on the uninterrupted flow of cotton from the south. So they winked at the system of slavery, and conveniently ignored its evil reality.

The Federal Government, which won the civil war, established 'Reformed Governments' in Southern States and 'Freedmen's Bureau' was formed to support the complete emancipation of the newly freed blacks.

Though slavery had been abolished by the 13th amendment of the constitution, the whites as a whole believed the blacks to be an inferior race. Therefore they were reluctant to do anything that would find a lasting solution to the question of racial discrimination by restoring 'racial equality'. Accordingly, the blacks continued to experience severe ethnic bias even in Northern metropolises like New York, Chicago and Detroit.

In order to dismantle the Southern discriminatory laws and restore equality, the 'Freedmen's Bureau' presented a new bill in the House of Representatives. The content of this bill was that those who were born in the United States of America and lived currently within the jurisdictions of their own respective states, would be American citizens even while they continue to be the citizens of their respective states. The main intention of this bill was to protect the citizenship of the blacks absolutely intact.

In the year 1868 seven Southern States including Alabama, Georgia and Florida joined the United States of America. The bill presented by the 'Freedmen's Bureau' was passed as the 14th amendment to the Constitution.

The blacks who were for the first time enfranchised, received more attention and importance in their respective assemblies. The Northern whites who migrated to the South to shape their political future also got more influence in the legislative councils there. The foray of the undeclared coalition of the Northern whites and that of the newly freed blacks, left the Southern whites a clear minority in their own States. No wonder they became helplessly bitter as they lost the legal backing of the old system. In certain respects, ordinary whites in the South were as unfree as the blacks. No wonder they began venting their spleen on the defenceless blacks in their frustration. In their attempt to win

back their lost influence they used aggressive tactics and illegal means. They became insensitive to arson, looting, mayhem and massacre. The Southern States were in the throes of an upheaval. The black community was hard hit as they had been caught in the heat and dust of the crossfire.

Unfortunately, some glaring lapses in a lax interpretation given to the 14th Amendment bill by the US Supreme Court, unwittingly poured oil to the fire that heated the already simmering racial cauldron. Even though its application was limited to the jurisdiction of the Federal Government, it unintentionally drew a narrow limit to the emerging contours of black freedom. In this confused scenario, colour prejudice reigned in the Southern States with an all time vigour and viciousness. Segregation in schools, public transports and social gatherings continued to be more rampant and unbearable. This triggered racial hatred among the populace there. Even in the armed forces racial discrimination was quietly connived at and conveniently tolerated. In short the 14th amendment to the Constitution won political freedom for the blacks without social equality and made their lives bitter and unbearable.

Even though, many blacks were elected to the House of Representatives, all other avenues of progress remained closed for them. They were continuously boycotted in all other spheres. Many of the blacks who were elected to the House of Representatives were appointed lieutenant governors and even governors. Ironically, once their terms in the house ended many of them had to do manual labour in order to eke out a mere living. Lack of required skills for any sort of gainful employment or trade hampered their reasonable living.

Dr. Washington records an incident in his book 'Up from Slavery':

Once while I was touring the Southern states, I passed by a building that was under construction. I heard a mason calling out for bricks for the continuation of his work in an upper-floor:

'Governor, bring up the bricks fast. '

I was intrigued by such repeated calls. Necessary inquiries later revealed that this 'governor' was a black man who was an elected representative in a previous election. Unfortunately, when his term ended, the only means of livelihood he found was manual labour.

A good number of black brethren who were elected from reserved black constituencies faced similar destiny. Further, due to illiteracy and lack of experience in administration, they committed many blunders endangering their progress.

Very few whites having good will tried to understand the sad plight of the blacks. They saw that only vocational education, not mere bookish knowledge, would unlock the true potential of the black youth. They had to be convinced that if equal opportunities and enough encouragement were provided the blacks wouldn't be far behind anyone. There was indeed enough black talent yearning to break free, if given the right opportunity.

A few white leaders came forward to draw and direct the inherent strengths of the blacks into creative and productive channels. They set up a handful of educational institutions.

General Armstrong who led the 'black platoon' during the civil war, opened the 'Hampton Normal and Industrial Institute' in Virginia State keeping in mind the above ideals. Many black youth got educated there. A few brilliant graduates among them completed their teachers' training also in the same institute.

Then, one day, General Armstrong received a letter from Tuskegee village in Alabama:

"We wish to open a school for blacks here. Please send us a white teacher."

General Armstrong immediately replied:

"Not white. I am sending a black teacher instead. His name is Booker.T.Washington."

O ALABAMA!

In the year 1832, there emerged in the rural heartlands of Alabama State, a freshly developing settlement called Tuskegee. The bustling village consisted of a cluster of about two thousand hutments of different sizes and shapes. Blacks formed more than half of the population of that rural community. Louis Adams, who had been just emancipated from slavery and George Campbell, who once owned a number of slaves, had together taken initiative to open a school there for black children. It was for this school that they had requested General Armstrong for a white teacher.

In response to their appeal, General Armstrong sent to Tuskegee a young and energetic black teacher who had only recently graduated from Hampton School. He was Booker. T. Washington.

Booker. T. Washington lit the lamp of knowledge in Tuskegee on 4th of July 1881 and thus 'Tuskegee Normal and Industrial School for Negroes' came into being.



This maiden venture had its start from a dilapidated church building with a team of thirty black students. They belonged to all age groups, say from fourteen to sixty. Once, while Washington inquired about the background of one of the students, he said that he was born in Virginia and was sold in Alabama in 1845.

"How many of you are there?"

"Five of us. Myself, my brother and three mules."

The black community did not know how to utilise the freedom that they had lately availed. In order to lead a simple and normal life they had to get rid of this burden of ignorance. They had to be educated. Washington believed that it was the responsibility of graduates like him.

Washington wrote in his book 'Up from Slavery':

They must be taught that their works must be completed as per planning, the students must be given an opportunity to absorb learning step by step. We are avoiding to face the reality by saying, 'we had worked hard in slavery. Why should we work hard now, when we are free?'

"It was not an easy task for those students who had till then suffered slavery. We have hardly any past history, no family name to be kept aloft by perseverance, and our ancestral lineage did not go beyond mothers. This has to be changed for our next generation. They should inherit family names and families of their own from us. They should feel proud of their heritage. Responsibility for all these rests on students like us. And to fulfil that ideal I joined Tuskegee instead of entering politics.

By the end of 1881, Washington purchased a plot of about 100 acres for \$500. Money for this deal was completely provided by General Armstrong. Within a year the number of students in Tuskegee swelled to fifty and Washington's dreams grew by leaps and bounds. Washington inspired the students to turn his dreams to reality. "There is dignity in working for one's own regeneration than to be crushed under economic or social slavery." To express these ideas more effectively to his students Washington himself came forward with muttock and spade. Students of Tuskegee received training in various trades side by side with learning. They were taught skills in carpentry, pottery, and the arts of making cotton mattresses and pillows,

cobbling shoes, managing brick kilns and in many other useful trades.

Once Washington and his students made strenuous efforts in setting up a brick kiln for days on end. All efforts came to naught. Shortage of funds was the regular feature. As a final effort to pool the necessary fund for fuel, Washington pawned his watch. This time the kiln worked but the watch disappeared forever. No regrets.

People living in the vicinity were impressed by the buildings students had erected under Washington's guidance. And the students enjoyed for the first time in their life the pleasure of staying in buildings they themselves constructed. The price they had to pay for those achievements were quite heavy.

Often they had to undergo deprivations of all kinds including starvation. If it was due to shortage of provisions on one occasion, some other time it might be due to the alternate use of the firewood meant for cooking in urgently heating the brick kilns. Tuskegee lore was replete with such incidents of grit and gumption. They bounced back each time when they were beset with adversity. Strong enthusiasm and unflinching determination had enabled them to complete the construction of the buildings in the campus. They never allowed adversity to cripple their will to go on.

Soon the students became experts in brick making. Bricks made in the kilns of Tuskegee campus acquired more demand outside. Inquiries and orders poured in from all directions. It was heartening to see in course of time that the items made in the campus such as doormats, mattresses, slippers, etc. were found on display in various markets of the state.

As demand in those goods increased there was felt a shortage of handcarts to transport the materials to far away markets. The school had no funds to buy them. Washington and his students solved this problem with a rare ingenuity. Before

long, handcarts made in Tuskegee campus were in high demand all over the markets.

One of the emancipated slaves had taught the students how to make knives and forks. It was Louis Adams who had taught them the art of making utensils. Washington's brother John, who too was from Hampton, helped the students to develop the art of bee-keeping and honey began to be served in the plates of students in Tuskegee!

The only devices that the blacks had at their disposal for survival were their physical prowess and ability to work hard. They had a luminous dream and undying faith that one day they would be able to live at par with the whites but survival till then was most crucial. The Constitutional amendment had given them freedom on a silver platter. Ironically, many intervening circumstances kept their freedom in abeyance. They had to prove themselves worthy of that freedom in order to enjoy it.

The dilemma of the blacks was that while biding their time for equal opportunity, they had to take care of their survival. They required physical strength, specialized skills, something to exchange or some gainful employment in order to manage their daily living while planning their ultimate prosperity.

Washington never allowed his students to become mere bookworms mugging up subjects like commerce, banking, etc. in their craze to imitate the higher society. He continued his efforts in shaping up a cadre of educated youth and specially chosen teachers from among them who could readily tighten their sashes and spearhead the task of uplifting their downtrodden brethren.

"The ultimate purpose of teaching various trades in Tuskegee institute, was to fulfil our needs. We needed an expertise in trades and crafts, if we wanted to dig our heels more deeply in the society. We were not ready to depend on others in fulfilling the needs that we could ourselves work out."

From the very beginning, 'Tuskegee Negro School' had a

tendency not to live away from the society outside. On the contrary, Washington eloquently expressed through his words and deeds that if the school and the village worked together both would benefit from each other's works.

The system of discipline there in Tuskegee, was praiseworthy. In that effort, Washington did not condone any kind of indiscipline there. Because of all these reasons, the villagers looked upon the school with a kind of reverential regard.

Due to the proximity of the school, Tuskegee was transformed into one of the reasonably developing and expanding villages in Alabama. The tireless efforts of Tuskegee students spurred the growth of cottage industries all around. As a result of all these, Tuskegee graduated into a bustling little township.

The meaningful struggles of the inmates of the Tuskegee school and their outcome upheld dignity of labour.

Washington soon hit upon a brilliant idea. It was to start a night school. According to him, the shortage of money should not be a stumbling block to hard working and ambitious students. 'Work during the day and learn by night' was a novel idea at that time. A student who had worked about ten hours a day in the campus, would be given free education by night. This process was indeed a 'baptism by fire' for the true scholar. Those who proved their mettle in the challenge had attained their goals. Those who worked sincerely were given their clothes, beds, and books free of charge as incentive. Any money left was credited to their accounts in the bank.

It was the prevailing tradition there to transfer a night scholar into day school once enough money would be credited to his account. Washington took special care in the case of these hardworking students. This was necessary to prevent them from going astray and for retaining their interest in studies.



The curriculum of Tuskegee school was thoroughly aimed at the basic development of the students' personality. There was no compromise on hygiene. They had to be taught in detail even the basic lessons in hygiene such as how to brush their teeth, how to take bath, how to wash and keep their clothes clean, and even how to wear them properly.

The students had to get up at 5.00 AM on hearing the rising bell. The night bell was at 9.30 PM. In between there were seventeen bells, each having its own meaning and reason. As soon as they got up, they had to do their beds and clean their respective dormitories. After the morning chores they gathered in the refectory as the bell goes for breakfast. They had to eat completely whatever food was served there. There were occasions when food was not adequately served due to shortage of provisions. That apart, discipline was not at all compromised even during such lean times! Life in early days of Tuskegee, went through bitter struggles and deprivations. Yet the ambience that existed there was one of courage and determination.



There were innumerable responsibilities on Washington's shoulders. Those who heard about his great expectations and dreams thought that they were impossible to be translated into reality. Failure in this experiment would have been disgraceful. In order to ward off such a massive misfortune, he encouraged his students to work to their top-notch capacity.

Washington stressed on the personality development of the students so that they should not be objects of ridicule anywhere in the outside world. The students of Tuskegee were expected to keep up a high standard of conduct. Unlike other schools there were no white teachers here to look after these things. Tuskegee school was run by the blacks for the blacks. There existed no kind of discrimination against female students or staff.

Washington was extremely careful to impart practical training to students together with instruction.

The purpose of education had already been defined as the physical, mental and spiritual development of the students. Washington had successfully accorded dignity to physical labour. He encouraged students to use more physical skills and less mechanical energy. Envisaging that Tuskegee school would one day become an inevitable part of the social fabric of Alabama, Washington continued his activities.

Washington had a vision while he embarked on this educational venture that those who had been taught and trained in Tuskegee should utilize their knowledge and strength for the upliftment of their downtrodden brethren. He had helped to deepen a conviction in their minds that the upliftment of the black society was their moral responsibility.

Washington's ceaseless efforts and sacrifices for the students fructified in course of time. Those who passed out from the institution, after having completed their education, were fired up by the same burning zeal that Washington had cherished in himself:

'I too will establish a school like this in my village'.

As recognition to the tireless service done to Tuskegee for the past fifteen years and for being the anchorman of black destiny, Harvard University honoured Washington with an honorary doctorate. The past fifteen years saw the rising of about forty elegant buildings in the campus. The buildings were constructed by the students using the bricks they themselves baked.



Dr. Washington was invited to speak in a meeting conducted under the auspices of 'Atlanta Cotton State and Industrial Exposition'. It was for the first time in the history of USA that a black person had been invited to deliver a prominent address to

an audience of only whites! This became a topic of discussion throughout the country. Can anyone imagine a black teacher sharing the dais with white leaders, that too in the presence of the American President Cleveland? Never happened before!

Dr. Washington knew very well his responsible role at this juncture and how it was one of the defining moments for black survival. He knew that it would create rumblings in the country and so he did his preparations thoroughly well before his departure for Atlanta.

Dr. Washington's address created a flutter all over the country. It was the first attempt of its kind to give the black voice space. For the first time in history, the hopes and frustrations of a whole generation of blacks were so vividly paraded. Washington appealed for brotherhood.

After this event, Washington got several opportunities to expose the black-woes in front of a wide world without bitterness but in a spirit of reconciliation. Those who supported the black cause, liberally strengthened Dr. Washington's hands. He held lecture tours and organised fund raising campaigns. He presented the good works done in Tuskegee in front of audiences and brought his difficulties to their notice. He succeeded in getting funds for the school. Soon, he came to be known as an orator and educationist who had given a new dimension to education and elevated his brethren from degradation to full human dignity.

Dr. Washington, who had tirelessly worked for the betterment of the society for the past fifteen years, helplessly stumbled on the jaws of a problem. It was not a personal one but a unique development that was threatening the Southern States as a whole.



As the European States had passed stringent laws against slavery, slave traders spread their tentacles in the South of America. The commodity here again was the same—the ignorant and

helpless black from Africa. Human energy from the slaves was the staple fodder for the expanding 'Cotton Empire'. Free labour and high prices for cotton fattened the money bags of the 'cotton barons' of the South. They were amassing wealth and the black slaves were suffering from the attrition.

The Southern farmers were blinded by the glitter of lucre they amassed this way. 'More cotton, more money' was their motto. They competed with one another in bringing more and more green zones under cultivation. They used the same free labour for deforestation. After cutting the bushes they burned even their roots. Very often, these greedy violations of ecology, used to go out of hand and engulfed the remaining greenery in forest fires.

The greed and lust of the 'cotton kings' debilitated Alabama. This exhaustive annihilation of greenery was unbearable for her. In the raging wind and manically pouring rain, the topsoil of Alabama's low-lying land was getting washed out into the sea. There were no trees to hold the soil. Alabama lost the occasions of a cool pleasure of wetness given to her by the dripping dew-drops. The course of monsoon turned erratic. She had to face an onrush of incessant rains that wounded and outraged her modesty. Desolation began to grip Alabama. Natural substances of the vegetation was drained into the sea. In order to compensate this deficiency, costly fertilizers containing nitrogen, potassium and phosphoric acid were required.

'Cotton mania' was at its peak and the cultivators lost their discretion. No one was ready to think about the day after. Wearing blinkers of dollar notes, everyone moved to the brink of disaster.

The blacks had relentlessly toiled for two and a half centuries to enrich the Southern States of America. They had no share in the profit. They didn't even have a patch of land that could be called their own. A legal provision that the blacks would be given forty acres of land and three mules per family

was not yet implemented due to some technical snags. Had that provision been implemented the condition of the blacks would have been more tolerable. It didn't happen so.

When the landlord snapped his fingers, a black had to cultivate cotton even to the threshold of his cabin. The blacks who danced to the tunes of the landlords saw no silver lining yet in their lives. They neglected the cultivation of consumables and the resultant shortage badly deprived the hard working blacks of their nourishment. Depressed and listless they were sinking to the bottom of desperation. Not only the blacks, but also the poor white farmers in South, were the victims of this sorry state of affairs.

Alabama, which was once a lush green forest of plentiness, was now a land of eroded soil and a home for desperate people. They were marching on their way to destruction by causing deforestation and incessantly cultivating cotton.

A 'redeemer' was urgently needed to pull back Alabama, nay the whole of South, from the brink of destruction.



'I WILL COME'

One morning in the year 1896, Dr. Washington was sitting in his office, forlorn and pondering:

'How much had I encouraged my poor and illiterate brethren to earn money from animal husbandry and other cottage industries so that they could send their children to schools? Alabama has become a waste land. Not a blade of grass grows here. How is it possible now to gather enough fodder for their livestock and breed them? Indeed these are the lean times! How can then one expect the children to come to school on empty stomachs?'

Dr. Washington had been struggling to clamber out of a whirlpool of problems that he was stuck in.

The 'redeemer' whom Dr. Washington had been yearning for, was one who would be capable of pulling Alabama from the brink of disaster. He must find scientific solutions to the riddles that had been unnerving her for some time now. The calamity had to be nipped in the bud to save livestock from death and the vegetation from further withering. Meanwhile, an untimely rain poured havoc in the endlessly vast cotton plantations by one night. A seamlessly ready cotton crop awaiting harvest turned overnight into a muddy mess. A chain of destruction started hitting Alabama one after the other.

An abrupt memory flash struck Dr. Washington, who was deeply absorbed in thought. He recalled a man congratulating

him once while he was coming down the dais after giving a speech in an Iowa-gathering:

"I am indeed happy to shake hands with a man who is really liberated."

"Thank you friend, I have just tried to do my duty. That's all." Dr. Washington humbly acknowledged the compliment.

"All are not like you, Dr. Washington. Ah... there is just one more soul like you, in the world. And his name is George Washington Carver."

"Why have I not heard that name before?"

"He's a young black agricultural scientist, currently teaching in Iowa State College."

"You mean there's a black agricultural scientist? And that he teaches in Iowa State College?"

"True. It won't be an exaggeration if I tell you that he can sprout seeds on wooden planks!"



Dr. Washington was thinking about the young black scientist called George Washington Carver:

'Perhaps he can bail out Alabama from her sad predicament. He must be highly qualified and getting a fat salary. He might be holding a high position that enabled him to enjoy a comfortable life in the North. How am I going to bring such a personality here?' When he thought about the improbability of the task in hand, Dr. Washington blushed at his own simplicity. 'Is it not unjust to bring such a high personality to this problem—ridden Alabama, whose soil is only fit for making bricks?'

The see-saw of his own conflicting thoughts had hurt Dr. Washington and diffidence took over him. Only when the picture of the starving millions of Alabama flashed upon his mind that

he quickly regained his composure. Then he wrote a letter. Addressed it to George Washington Carver in Iowa and posted it.

The letter contained a brief history of Alabama, the adverse phase through which it was passing at the moment, his limitations and the growing needs. Dr. Washington concluded his letter, "I cannot offer you money, position or fame. You already have the first two. You can earn the third here profusely. What I am requesting you now is to give up all these and instead I offer you ceaseless struggles, the task of bringing out people from degradation, poverty and waste to full manhood."

George received this letter within four days. He readily guessed from the stamp affixed on the envelope that the letter must have been somewhere from the rural heartlands of one of the Southern States. He opened the letter and read its contents in one breath. Then he went on doing his works in the laboratory as usual. Once free, he went out to his usual resort outside Ames campus and read the letter peacefully and in detail. Then he reflected for a moment or two. He took out a small diary from his pocket and tore a page from it. Wrote only three words:

"I will come."

He signed the letter. Nothing else. No day. No date. No question. Not even a doubt!

That one moment of choice gave George profound relief. A whiff of peace breezed through his being. He closed the envelope and wrote the address. Then he went to the post office, affixed the required stamp and posted it. He returned to the lab and finished the remaining part of the day's routine. He felt that he had never enjoyed such a peace of mind even when he had received the M.S. Degree.

Yet, there was something that went on pricking his being. What was that? Why was the thread of joy ruptured in between? George was now facing his moment of truth. He pondered, 'How many of my brethren must now be grappling with poverty and

want in the hinterlands of the South? How many of them may be thirsting for knowledge? I am theirs and my knowledge is for their welfare. I have to keep the word given to aunt Maria.'

George now realized that this was his true calling. This must be fulfilled under divine guidance. Presently, he got an inkling of the sort of work Dr. Washington had been engaged in. George was relieved to see that Dr. Washington had at his disposal some handy solutions for the vexing racial problem.



For a week, he kept mum on the letter and its contents. He finished all important and pending works in the lab and gave the necessary instructions to his assistants for the continuation of an efficient work regiment even after his departure from there. After such preparations, he approached Prof. Wilson and placed the letter in front of him. Prof. Wilson read the letter carefully. In fact he had guessed what's the kind of reply George would have had given to the letter. Mapping the calmness on his face George said:

"I have responded to the letter positively."

"George, this was inevitable. I knew that it had to happen one day or other." Prof. Wilson then continued in a listless voice, "We knew that you could not be held here for long!"

"All arrangements for the uninterrupted running of the lab has been done. The staff has already become experts. I am sure that my absence will in no way affect the efficient and continuous working of the lab here."

"Agreed. But who will fill the void created by your absence?"

Then, both of them went together to see the head of the institution. He too closely read Dr. Washington's letter and said with charged feelings, "It's unfortunate and utter folly to turn

away one's face from a noble mission. You are invited to take part in the great task of upholding eternal values after rejecting your present position and all privileges attached with it. Now that you have held your hand on the plough, you are not to look back."

Holding George's hands he continued in a sore voice, "George, you must be remembering what was Prof. Wilson's response when there was an offer for you from an agricultural college, 'We don't want to lose George. It's very difficult to get someone else like him'. Now don't think that we are flattering you. George, you are worthy of it."

He continued, "We can't stop you this time. We can see that your life's mission is now beckoning you. We do not want to lay upon ourselves the guilt of shackling you to this narrow confines. Go ahead. And God bless you."

The college gave George a hearty send off. Representing the students and the staff, Prof. Wilson presented George a microscope. In his reply speech, George said with emotion, "What I am today is due to this college. I am infinitely grateful to you all for this great encouragement".

It was not at all difficult for an intelligent and industrious student like George to take a doctorate in his chosen field of fungi studies after M.S. What he had done instead was to reject his desire for personal development and go for the service of his downtrodden brethren responding to Dr. Washington's call.

□

Prof. George Carver was appointed in 'Tuskegee Normal and Industrial School for Negroes' as 'Director and Instructor in Scientific Agriculture and Dairy Farming'. He would draw there a salary of \$1500/- per annum!

□□

A TRYST WITH TUSKEGEE

On a fresh October morning, Prof. George Washington Carver sat in a train that was heading for Alabama in the American South. His destination was a far-flung and hitherto unfamiliar Tuskegee village. Pushing behind fresh green fields and a picturesque Northern landscape, the train galloped in to the heart of the South. George Carver was viewing the panorama of the outlying hills quite appreciatively through the window frame.

The train then began to slither into the seamless cotton territory where ready to be harvested white cotton lay unendingly in the plantations. All over, it was the blacks that were engaged in the cotton picking activities. Prof. Carver knew well that even if one would go a thousand miles further to the South, North or East, the same sad scenario would be replicated.

George Carver alighted at 'Chehaw' station that was the nearest rail threshold to Tuskegee. It was 8 October 1896. There were a few students from Tuskegee to receive him. They took charge of his luggage and the horse cart they brought darted towards the school. 'This school might be an oasis in the midst of this desolation....a few flower plants may be there to welcome me...and a little greenery in front of the school...I shall serve my brethren, nay the whole of Alabama, from the laboratory of the school,' George Carver was planning.

The carriage halted at the school gates. Prof. George Carver didn't even have an inkling that they had reached the school, as there was nothing to signify the existence of a traditional school

building there. The surroundings were more barren than the places he passed on the way from the railway station. A kind of dusty, yellowish, sandy soil did overlay there and no vegetation thrived on it. Looking up to the horizon one could see only silhouetted skeletons of dried shrubs all along. A band of vultures hovering above the school building created an uneasy feeling deep down his belly. In the absence of an effective drainage system effluents clogged all around the building spreading muck and foul stench.

Bending forward, George Carver scooped a handful of the soil and it slipped through his fingers.

'It requires manure.'

The dry and listless topsoil lay unevenly spread out. Even a full size horse could be lost in one of the deep clefts. This waste, infertile and desolate land. Red, yellow, purple, brown land. Not a blade of grass grows here. Nothing green to be found.

'If God had willed my life to be a bed of roses, he would not have sent me to this black race.'

Till a moment earlier, the name of Tuskegee had inspired him with a kind of curious assurance. And now, while looking at the dusky sky in the deafening silence of twilight he saw a challenge that would test his mind and mettle. 'Here people have to be literally delivered from evil. Now on, this bottomless pit of hunger is my mission station!'

□

Prof. George Carver was duly ushered into Dr. Washington's office. He had been trying to pacify his agitated mind as best as he could during the long wait for Prof. Carver. Seeing George Carver at the doorstep, Dr. Washington sprang up there to receive him. The snow hill of his anxiety began to melt in the warmth of that rare configuration. Prof. Carver's simplicity, his deeply searching eyes with a rare understanding looks in them, his measured talks and all else that belonged to him endeared him

to Dr. Washington at first sight. At the first meeting itself Dr. Washington recognized that Prof. Carver was an extraordinary person. That his new colleague would be a paragon of such high virtues was beyond Dr. Washington's wildest of expectations. 'Now the future of Tuskegee is safe in his hands.'

It was a timely shot in the arm of Dr. Washington's sagging spirits and Tuskegee's sails had gotten a second wind.

It was a rare case of friendship at first sight. Those two charismatic black gentlemen instantly intertwined the threads of their lives into one. This unbroken bond went beyond the death of Dr. Washington and continued to live until the last breath of Prof. Carver. Tempting baits of fat salary or glittering positions could not snap that bond. Prof. Carver found honour in being bonded in that commitment.

□

"What do you think of our school?"

"Hm.... a lot remains to be done."

"Very correct! Reforms are 'now' going to take place."

Prof. Carver then continued knowing where the stress was: "Your works are indeed praiseworthy. You have honoured me by allowing me to participate in your mission."

"You have to really work hard. The resurrection has just begun...a lot more has to happen before that..."

"I know. I am ready to accommodate to the realities existing here," Prof. Carver assured.

"If you succeed in what you are bent on doing here the whole of Southern America would be free from destruction. The future now lies in your hands."

"Um.... May I know where's the laboratory?"

"There's a lot of land here for a laboratory and God has given you sharp intelligence." Dr. Washington laughed meaningfully.

"Oh! Now I understand. We both have to be tied under

the same yoke. Isn't that what you mean?"

Dr. Washihngton heartily laughed at this tag. Prof. George Carver presently chimed into share that laughter. The newly bloomed tie-up soon began to blossom and flourish profusely. Rubbing shoulders they walked ahead...and their paired footsteps were getting ready to stride toward the horizon.



So, there was no laboratory. No trees. Not even a botanical garden. In short, Prof. Carver was invited to serve an institution devoid of even the basic facilities. He had to struggle hard to improve the soil, agriculture, and living standard of people there. In order to abate the endless list of Alabama's woes, he had embarked on a series of research.

Prof. George Carver hit upon one truth from the very beginning that the majority of Tuskegee students were reluctant to learn agriculture and its related subjects. On the contrary, they wanted to take up 'respectable subjects' like business, commerce, banking, etc. The wrong notion that agriculture could be done by any dud was the cause of this reluctance. The primary task of Prof. Carver was to erase this erroneous notion from their minds and help them to reduce the distance they kept from the soil.



In the first lecture itself Prof. Carver stressed:

Young friends, nature reveals her secrets only to those who go near her. The invaluable knowledge that nature shares with you is essential to conduct your own daily lives. You see them with open eyes and hear them with open ears. You can crack the mysteries of nature only when you get involved with her. The bank balance that you have or the quality of the dress you wear does not measure up success. The fulfilment of your life depends on how much service you can do to your fellow human.

Profusely beaming at students, Prof. Carver continued:

You go out of the classes and study in the open. Innovation is the key and you must think beyond the immediate by going farther from the beaten track. Go to the villages and pick up the discarded utensils in the backyards of households. Collect broken earthen pots, oil lamps, empty bottles, old glass utensils, tin vessels and almost anything that can be revamped for further use. We can put them to use when we will have a laboratory of our own." Prof. Carver opened his box and showed the students some of the lab equipments that he had brought with him.

From the following day onwards the professor and his students began to tour the villages collecting 'lab instruments'. Almost everyone participated in the unique adventure. On their return he used to encourage them for their good works saying:

"None of the items you have brought here is useless. Some of them will be of use now and others later."

Today, those 'lab equipments' made from trash, which Prof. Carver used in salvaging Alabama from the edge of doom, attract a visitor to the 'Carver Museum' more than anything else. They are preserved carefully among the prominent Carver memorabilia as relics of a well-spent life. Among the various artefacts displayed, there is a lantern that was polished till it sparkled. Its glasscase was blackened all over but a small circle was kept in the middle quite clean and transparent. It was a device to throw up more light into the microscope. Empty ink bottles were used as Bunsen burner, tea cups as mortars and wooden spikes shaped as beaters. Fixing labels on empty fruit tin containers of different chemical compounds were made. Neck-broken bottles were cut round by using heated iron wires and were used as glass jars. Making holes of different sizes on thin tin sheets he made sieves of different sizes and shapes to filter soil.

When they saw a laboratory in the making in front of their

eyes, the students were spellbound! None of the agricultural students of latter years who were trained under Prof. Carver and later on engaged in social work or agricultural reforms had ever grumbled about the paucity of tools. They had a strong conviction that sophisticated and costly equipments were not absolutely necessary to scientific discoveries. One of Prof. Carver's catch phrases that the students constantly kept burning in their hearts was:

Use ordinary tools and create extraordinary results. Give importance to the products that would help fill the plates in front of your brethren.



Prof. Carver was given a twenty-acre plot in the campus for various agricultural experiments. When a professor began plowing the land, villagers thronged to see the 'great event' with a curiosity mixed with disdain. They had only seen so far land being tilled with mattocks. Seeing some one plowing the land using horses was unheard of.

Prof. Carver went on with his works while patiently answering their questions:

When clay sticks to the plough's blade, we must know that the soil below is wet. How could then air pass to the bottom of the soil? If air does not reach the tender roots, the growth of the plants would become stunted. Therefore it is necessary that the soil should be spongy while sowing.

After finishing the plowing, he spread organic manure such as compost, cow dung and green leaves that were collected by the students. Once again he ploughed the plot and brought all the manure deeply under the soil. The criticism of the onlookers now turned into curiosity.

After such strenuous preparation, he started to sow seeds of cowpeas. When they saw the seeds they thought that he was indeed eccentric. It was not cotton seeds, but cowpeas

that was sown. Prof. Carver explained to the onlookers, "Nitrogen needed in the body of many plants is made available in the soil by bacteria which deposit the same on the roots of certain plants such as the pulses. It is a fact, that the cotton plants draw heavily on the nitrogen present in the soil. Cultivation of the bean varieties will greatly enhance the nitrogen reserve in the soil. After the cultivation of the pulses, next crop would amply benefit from an increased nitrogen reserve in the soil. The peanut plants would additionally bring into the soil potash and phosphate. That also would be beneficial to the next crop.

In spite of such bravado and daring, the yield of a lean harvest had upset the villagers' expectations. The pathetic yield consisted of a few thin pods on each plant and some scattered seeds in each pod! The students mockingly commented:

"They are good enough to be thrown to the pigs."

Yet, they could not fathom why Prof. Carver alone was bubbling with enthusiasm. When he told them that he was going to cook the cowpeas for them, they were really sceptical. They could only wonder when they ate for that dinner the mouth-watering dish made of cowpeas! Seeing the sceptics gulping a second or third helping Prof. Carver beamed with pride. Soon it was the talk of the town.

After cowpeas, sweet potato was cultivated. This time the villagers kept mum. They quietly watched the goings on. Mama mea! This time there was a tenfold harvest. Incredible! There were eighty bushels of sweet potato yield per acre. The sceptics were dumbfounded. They had never seen in their lifetime such a bumper crop. What manner of a man is this professor?

So far what the school was getting from those twenty acres of land was five bales of carded cotton, a hundred bushels of sweet potato and an annual loss of \$16.50.



Following are the qualities of an ideal teacher: First of all he should have a deep knowledge in the subject that he teaches. Then he should be able to communicate effectively and easily the knowledge that he has, to the students in his care. Those who were fortunate enough to have studied under Prof. Carver experienced that these qualities were amply present in him. One of his students who had taken his agricultural degree elsewhere and later got trained under Prof. Carver, said, "I have taken my degree from Carnell College, but my real education was under Prof. Carver."

When, on 8 October 1896, Prof. Carver took up the reins of his department, there were only thirteen students who had offered agriculture as their subject. When it neared the major vacation of 1897 May, there were seventy-eight names on roll call including three girls. Mr T. M. Campbell writes in his book, "The blacks had no freedom to do any other work but agriculture. Due to wrong notions and generations of slavish mentality I believed that only whites were capable of doing other works. After joining Tuskegee, I saw the various works done by the students in the campus. They made bricks, utensils, shoes, mattresses, bags, brooms, cots, clothes, etc. When I saw them staying in residences built by themselves, I was convinced for the first time in my life that black youth too could do any work and achieve skills in any field. When this truth touched my heart my self-respect and confidence increased manifold."

It was this T.M. Campbell who became the first black officer of the American Agriculture Department. Those who had studied under Prof. Carver had exhibited their depth of knowledge and skill wherever they went. He was always particular to encourage his students generously. He used to say, "You cannot teach any one anything new. You can only touch and lead out the already inherent talents in them."

Prof. Carver used to deftly dig out the 'best' of dormant talents in his students and would promote them strenuously.



Once, Dr. Washington had an opportunity to be proud of his worthy colleague. He had ordered certain quantity of fertilizer with a dealer at the request of Prof. Carver. Instead of the required fertilizer the dealer had sent a letter to him, "I am writing this letter frankly to you as an admirer of your agricultural experiments as well as a well-wisher...I know a black agriculture scientist. It is difficult to find some one who knows the use of fertilizers for agricultural experiments better than him. He is in Iowa. His name is George Washington Carver."

Dr. Washington swiftly replied, "The great scientist whom you have mentioned has been staying with us and is currently working in our institution. All the agricultural experiments here are carried out with his direct knowledge and approval. Please send us at your earliest convenience the whole quantity of fertilizer necessary for three years." All the required quantity of fertilizer bags reached Tuskegee within a week. Thereafter, Prof. Carver never required chemical fertilizers for his agricultural experiments.

Fertilizers were good enough to replenish the loss of fertility in the soil but their forbidding price made them unaffordable to the ordinary farmers. Only the school could afford them. Prof. Carver instructed the students to dig several compost pits behind the school kitchen and taught them how to deposit the kitchen wastes like skins of vegetables, rotten fruits and green leaves.

Due to the lavish use of compost, Tuskegee began to wear a youthful look and throbbed with green vitality. Seeing the good results more and more farmers began to follow this method. In course of time the farmers of Alabama learnt the economic and effective use of organic manure.

Elaborating on his agricultural methods Prof. Carver said,

When I reached Tuskegee this was the least arable landscape in all of Alabama filled with sand and pebbles. I had to accept that it was this sandy desolation that was in my lot to live and move. There were only two options in front of me. One was to curse my fate and the other was to do something to bring this land alive. I chose the second option.



After sweet potato, Prof. Carver cultivated cotton. Villagers from the vicinity came in droves to see the mature cotton crop standing ready to be harvested and they wondered looking at the abundance of a hundred fold harvest. To be precise, the average yield per acre was five hundred pounds of baled cotton. This caused quite a flutter among the farmers, black as well as white. The farmers in their lifetime, nay Alabama in her long history, had never seen such a huge harvest of cotton.

Prof. Carver talked to the villagers as well as his students about the advantage of experiments with rotation of crops, "Rotation of crops gives the soil the needed rest. The land regains vigour and vitality from this rest and the land's fertility is enhanced."

It was news in Tuskegee that a 'school master' from the North knowing nothing about cotton cultivation had created a revolution in cotton yield. In between his agricultural experiments for the past three years he had convinced his students and the villagers, "Plants need certain things and the soil provides only certain things. To find out the compatibility between the plant and soil and then grow the crop accordingly, is the function of a real farmer."

It is a very good idea to meet each farmer individually, listen to his problems and give suitable suggestions. On the contrary if a number of farmers come together, track common problems,

and seek common solutions that would be more convenient and effective. So, Prof. Carver started a new routine. As decided, farmers of Maken County began to assemble in Tuskegee School on Thursday evenings to share their ideas on farming and other related subjects.

About seventy farmers attended the first meeting. Under the able guidance of Prof. Carver they discussed various problems faced by the farmers and sought their solutions. Those who had done cultivation under the direction of Prof. Carver tremendously benefited. Seeing this, more farmers were attracted to the meeting. Gradually, these meetings paved way for the formation of a 'Farmers' Association'. Prof. Carver was the director of the newly formed association. He presented in front of them his opinions and directions in a very simple and transparent language. He spoke to them on scientific farming and the need to retain the fertility of topsoil. Printed leaflets were distributed during these get-togethers. One of the editorials said in a very simple language:

Bush clearance by burning before cotton cultivation would do irreparable damage to the humus. In order to prevent this we will have to abandon the ruinous 'scorched earth policy'. On the contrary, if land were more deeply tilled, the humus that goes under would retain its fertility.



More farmers in the vicinity began to be convinced that if one cultivated crops according to Prof. Carver's directions, one would only stand to gain. Those who remained aloof criticizing Carver's enterprise began to trickle into the association one by one creating momentum. Soon, Prof. Carver took an adventurous step forward in this direction. He embarked on an awareness campaign by organizing agricultural exhibitions that went as far into the heartlands of Alabama. During these exhibitions, Prof. Carver and his students displayed items they made. Ropes made from

the fibre of cotton plants collected after harvest, paper, and rugs etc. were skilfully exhibited. They included rugs and blankets made from the fibre of worthless okra plant.

Villagers in the Southern States had a wrong notion that tomato was a poisonous fruit. Prof. Carver and his team displayed before them raw tomatoes as well as a host of menus prepared out of them. They ate them in front of those who entertained doubts in order to remove completely the wrong notion from their minds. They also made a kind of paper from 'yucca' fibre and peanut husk that had resemblance to a quality cloth made of cotton. They included among the exhibits terracotta utensils made from Alabama clay. Their motto seemed to be 'best from waste' and they produced useful things from materials traditionally considered useless.

In the beginning those exhibitions were carried on in a small scale in the vicinity using a handcart. Later, with increase in the number and variety of agricultural products, the exhibitions too became larger and frequent. Prof. Carver and his team organized a major exhibition in Montgomery in the year 1903. The momentum created by those agricultural exhibitions boosted production and enhanced the farmers' hope in future.

Annual gatherings of the 'Farmers' Association' were held in the month of February in Tuskegee campus. This get-together created the ambience of a festival in Tuskegee. Those poor and simple people would eagerly seize opportunities to talk with Dr. Washington and Prof. Carver. They would enjoy moving around the premises and marvelling at the buildings. The days of such annual celebrations were occasions to savour these experiences.

After the convention gets over, it was a week's struggle for the students of Tuskegee to clean up the campus. Yet they never grudged the additional burden of sprucing up, as they were themselves witnesses to the Herculean tasks undertaken by Dr. Washington and Prof. Carver for shaping their glorious future. The students were deeply convinced that both these stalwarts

had dedicated their lives to attain this noble goal.

Prof. Carver's soft spokenness, humility and unequal work habit earned a revered place for him in the hearts of the villagers. They believed that this professor who easily understood the woes of plants and animals could definitely understand human pangs and pains. With this confidence they poured their problems freely in front of him. He knew very well that the reason for their illnesses was nothing but vitamin deficiency in their food intake. Therefore, it was easy for him to give them 'medicines'. He used to boil leaves, trunks and roots of various medicinal herbs rich in vitamin contents.

Prof. Carver used to explain to the villagers the vitamins contained in certain plants and the nourishing potential that they had. He taught them how to combat the vitamin deficiency in them by preparing and using certain kinds of soups. Consequently the illiterate villagers affectionately called him 'doctor'. The villagers gave this endearing honorific to him long before any university had given him a doctorate in a largely attended convocation.

This 'doctor' was different from many others in that he never charged any fees for consultation or treatment. On the contrary he used to spend money from his own pocket and make available seeds or manure for poor farmers. In addition to this he used to go personally to the place of such farmers by walking two or three miles to explain how to sow the seeds and administer manure to them. On such occasions this 'honourable doctor' used to unfurl his ideas on a life of co-relationship among flora, fauna, the sun and the earth. Their togetherness forms the environment. He explained to the simple villagers the 'cycle of seasons' and what were the effects of seasons on nature. He taught them to identify poisonous plants and destroy them.

The villagers firmly believed that there was hardly any plant on earth of which Prof. Carver did not have enough knowledge. Some of them had a manic enthusiasm to collect such unusual

variety of plants seen on the way and seek clarifications from him. This 'doctor' had never belied their faith in him and would instantly give them the necessary clarifications. This knowledge helped the villagers to identify the poisonous plants and easily destroy them. Whenever Prof. Carver saw sick plants or see insects that could possibly cause disease to plants he would immediately warn the farmers and suggest possible solutions. Prof. Carver says:

"Real mycologist is expected not only to detect the presently existing diseases in plants but also must be capable of recognizing the diseases that could occur in another fifty years time."

Prof. Carver's knowledge about plants was a well-known fact in Tuskegee. While walking along the pathways if he happened to see a new variety of plant or stone he would immediately pick it up. If someone asked him what he was doing, then he would deliver a half an hour long lecture that would engross the questioner. It would be a talk about the genus and species of the plant, its use, qualities, etc. It was a regular sight in Tuskegee.



In course of time some of the white men while meeting Prof. Carver on the way began to talk about plants. Showing their own gardens they used to lay bare their problems in front of him unhesitantly. Prof. Carver had no problem in providing them with instant solutions to their problems. If he happened to meet any of them on the way next time he would definitely ask about the condition of the plants in their gardens. Where was the chance of racial discrimination on such occasions? How soon do the people who love plants and flowers become friends?

Since he set foot in Tuskegee Prof. Carver was always engaged in solving this or that problem. It was Dr. Washington who used to present problems one after the other and it was Prof. Carver's turn to find solutions one by one. This was a

constant process that was going on in Tuskegee. Once a problem creeps into his mind Prof. Carver would not rest until a solution was found. Dr. Washington knew well this quality in Prof. Carver.

The lean and dry environment seen around the campus had always made Dr. Washington uneasy. Whenever there was a function it was the turn of the students to tie some branches of the trees here and there and arrange some flowerpots in some key positions. This one-day's wonder and temporary greenery disheartened Dr. Washington.

One day with a little hesitation Dr. Washington placed this problem in front of him. And lo! Prof. Carver had immediately set out to make the whole campus green!

Prof. Carver sowed Bermuda grass on both sides of the footpath. As soon as they germinated the blades were crushed under the feet of students as well as teachers. With a renewed determination he sowed the same seeds of grass again. The result was not different. He set up there a board with some stricter warning. Even that had no effect at all. Prof. Carver now needed a rethinking and a new policy formulation. The new policy was very successful and the lawn in front of the school became greenish in a matter of days. When a curious Dr. Wahington asked him the reason behind this success, Prof. Carver explained:

I learnt one truth. Whatever others say or do people don't change their ways. No one becomes easily ready to change one's 'way'. Once that idea struck me I observed the pattern of their walking. I changed my policy and then kept their footpaths under their very feet. Is not grass growing there fast?



Knowing about Prof. Carver's keen intelligence and his ability to quickly analyse and evaluate matters, Dr. Washington used to discuss with him various matters before taking crucial

decisions. Prof. Carver on his part was very particular to weigh matters with more care and responsibility before giving his opinions. Prof. Carver turned his careful eyes on all activities in the campus besides his own Agriculture Department. As a result there was no extravagance and that enhanced profitability in all enterprises of Tuskegee.

The Southern blacks still considered Prof. Carver an 'outsider'. This tendency perhaps was due to a predominance of Northern influence in Prof. Carver's manner, behaviour and accent. The Southern blacks considered the accent of the northern blacks as belonging to the high society. The Tuskegee blacks nicknamed Prof. Carver 'Yankee scientist'. In fact there was a clear evidence of Northern influence on Prof. Carver. Unfortunately this influence singled him out from the Southern blacks.

Dr. Washington's brother John was working in Tuskegee school. John and his cronies often sniped at Prof. Carver from the safety of their clique. They used to throw a spanner in whatever good works he was engaged in with a sort of prejudice solely because he was a Northerner.

From the very beginning Prof. Carver had plenty of opposition from this clique to contend with. They argued from the beginning his appointment in Tuskegee stating, 'Why do we need a scientist and that too from the north as the head of Agriculture and Dairy Department?' The residential room given to Prof. Carver was not large enough. Due to space crunch many of his trunks remained in the congested room unopened and he could not take out some of the most needed reference books. If a farmer or a cowherd had approached him for advice he had to search for books from pillar to post.

Harassment by the clique wasn't limited to the question of residence alone. They began to show red flags on Prof. Carver's suggestions. Smooth functioning of his daily activities began to be difficult. At first Prof. Carver discarded all these as mere pranks

but that only helped to further incense them. When this was beyond his tolerance he approached Dr. Washington and laid bare everything regarding their harassment through a letter of complaint.

Dr. Washington, who knew the value of Prof. Carver more than any one immediately granted him all the facilities and gave proper warning to those colleagues who meddled with Prof. Carver's affairs.

□

Prof. Carver continued his early morning walks very regularly. It was during these interludes that he could acquire more knowledge about the remaining trees in Alabama. He studied in detail some variety of valuable and useful trees. Some of them provided strong and high quality timber. Whatever knowledge he acquired he acquainted them with. He collected and tested many soil samples. Yet, he could not easily come to know the mysteries that were under Alabama's soil.

One morning, Prof. Carver was on his way back from his usual nature walk. As he was fully engrossed in thought he did not see a puddle along the way and by chance slipped into it. Muddy water splashed on his clothes. He tried to wipe out the muddied water on his trousers with a handkerchief. After rubbing several times, the mud was removed but several bluish stains remained. 'Beautiful blue hue', he exclaimed. Then he washed the handkerchief several times. Yet the blue stains stubbornly remained. He studied the kerchief carefully.

'Thank God. You have solved the riddle that had been harassing my mind so long'.

Prof. Carver hurriedly walked towards the laboratory even without changing his stained clothes. The soil sample he had carried in his fists was subjected to various experiments. At the end of a number of experiments he could extract a deep blue colour from that soil.

'O my God! People here are walking over such a high quality colour!'

Prof. Carver was in the ecstasy of getting a revelation. Collecting more clay samples he continued his experiments day and night. At the end of it he could segregate several qualities of dyes that were inherent in the soil. Adding different kinds of oil and powders he succeeded in preparing reasonably good quality paint. He applied them on wooden planks and canvas. Once he was absolutely sure of the quality, he published in detail the various aspects of the dye in a scientific journal.

Soon, Prof. Carver got a golden opportunity to test the efficacy of this colour dye. One day, he reached a village in the outskirts of Montgomery town on an invitation to attend a white farmers' meeting.

The venue was their old and dilapidated parish church. After the meeting, during informal talks, Prof. Carver came to know that it was due to financial crunch that the external paint of the church was left undone. If the painting were not done in time the dilapidated structure would fall a prey to the vagaries of an impending monsoon.

"Is paint so costly?"

"In a way yes. If the cotton yield this time is good, then we could easily collect enough money, but for that we have to wait a long time until the rains get over."

"Don't worry. I will give you good paint."

Prof. Carver assured them, but many among them did not believe his words, "Can this shabby black professor called 'doctor' give the quantity of paint enough to paint church?"

Soon they were proved wrong. One day a handcart halted in front of the church. The villagers were surprised to see Prof. Carver and his young students. They took out drums filled with paint. Under the able guidance of Prof. Carver they painted the whole church. The faithful who came for the Sunday morning mass were thrilled to see their cute little parish church matching

the sky in colour. Has blueness such elegance? The rains poured. Winds howled. Yet, the paint neither cracked nor peeled.

Prof. Carver discovered later from the soil of Montgomery a blue dye that was seventy times deeper in shade than the existing one. This was known as 'Royal Blue'. This dye was believed to have been lost with the destruction of ancient Egyptian civilization. And this dye was reborn in Prof. Carver's laboratory by his relentless efforts.

As soon as they got wind of the discovery of this new dye, paint manufacturers competed with one another to contact Prof. Carver. They wanted to develop this dye on a commercial basis. One of them tempted him:

"We will give your name to the new dye. You will be famous and be respected."

"No. Not at all."

Prof. Carver strongly rejected that proposal. He never misused his name either for personal benefit or for any one else's benefit. He never wanted to commercially utilize his own discoveries.

"The fruit of my labour must go to the poorest of the poor farmers at affordable cost." Prof. Carver's research was always motivated by this noble ideal.

The fame of his 'Royal Blue' began to spread far and wide. An article appeared in the 'Iowa State Register' on this topic. The article recognised his efforts and praised him for his strenuous and ceaseless involvement in research to improve the lot of his brethren. All these achievements earned a name and position for Prof. Carver.



James Wilson, former professor of Simpson College, had become the U.S. Secretary for Agriculture. He visited Tuskegee at the invitation of Prof. Carver in the year 1898. Tuskegee wore a festive look. Visit of a high-ranking Government dignitary like

him was a rare cause for celebration. In fact, not even an officer of a lesser rank had ever passed by that area. Therefore, the whole of Tuskegee celebrated this unique event with gusto. Tuskegee was thrilled!

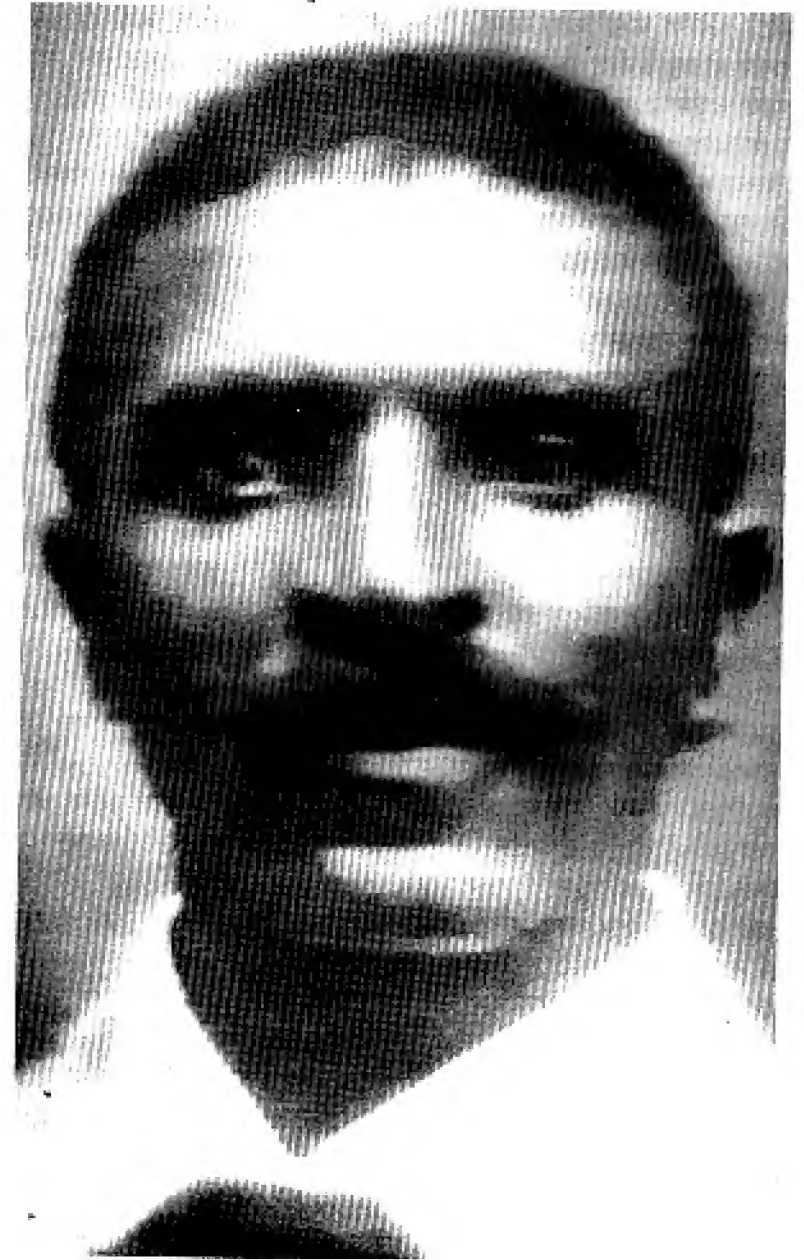
During the public meeting Mr Wilson spoke pointing out to Prof. Carver:

It is not enough to say that Tuskegee had opened an Agricultural Department. In fact it has opened a new door of Agricultural Science for the people. We see now that Agricultural Science is marching forward in fresh directions blazing new trails. It is a worthy trend.

□

The sapling that was brought by Dr. Washington from the North was now thriving on deeply rooted in the Southern soil.

□□



George Washington Carver



Black farmer's shack



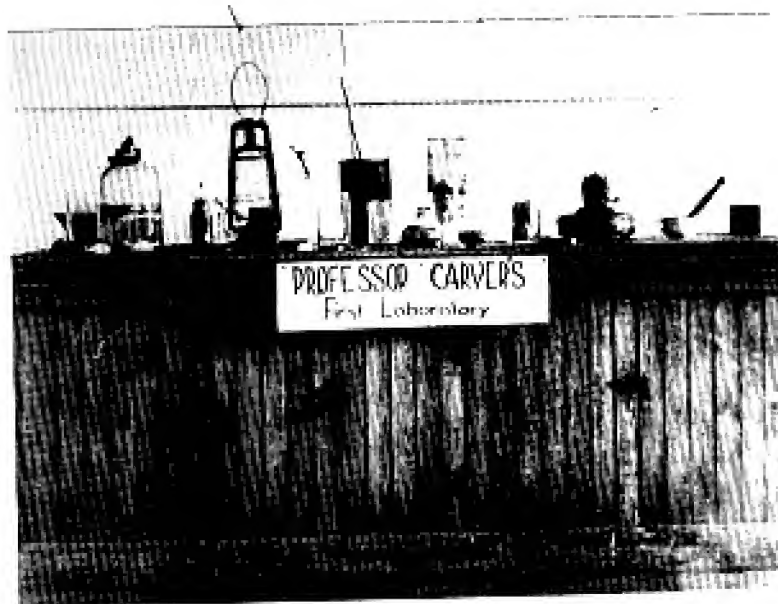
Laying the foundation stone



Early Tuskegee



Roof construction in progress



His early lab from scrap



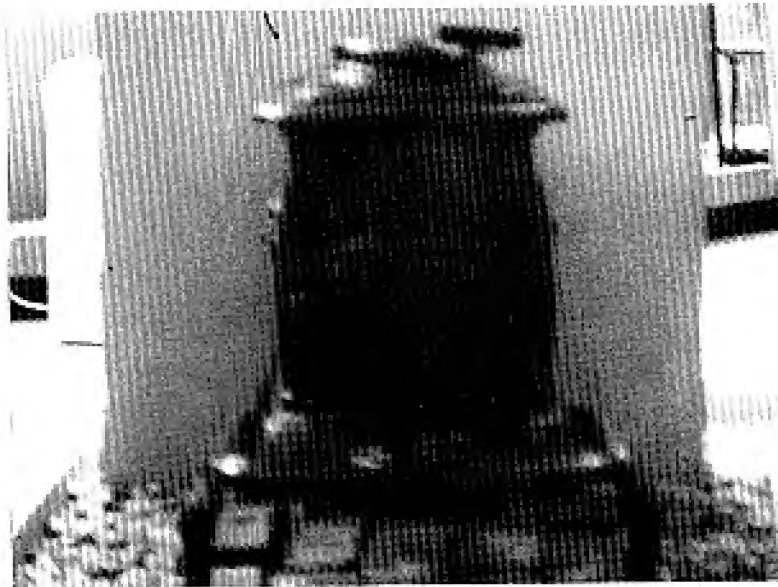
Transplanting knowledge



Ploughing the field



School on wheels



His soup-vessel and stove



Working in lab



With Henry Ford



Amidst cascade of letters



Bustling Tuskegee



Front view of the museum

A GANGES IN FLUX

Those were the days when sweet strains of music filled the ambience of Tuskegee. On Sunday evenings students would gather in the School Chapel. Then they would sing together pious hymns setting off the flow of music. Even Prof. Carver had never before heard such soul-stirring hymns.

Magnetized by Dr. Washington's growing reputation, people from far and wide visited Tuskegee frequently. They came to see his efforts to transform his students into skillful and industrious hands. Many of the visitors would go ecstatic by listening to the touching hymns sung by the youth born in the dying embers of slavery. They would carry back home lots of memories that could be cherished for a long time to come.

Prof. Carver was very particular not to miss any of those Sunday evenings, full of exhilarating music. The angelic chorus would take him back to his lost childhood and to the world of his mother's lullabies. They provided him with enough warmth and support to cruise along in a lonely life.

Once, while Prof. Carver was returning from one such session, he saw an old piano lying in one of the larger halls. He had not touched this instrument for a long time. He moved towards it. He remembered the compositions he had learnt from Mrs Millholland. Those memories began to flow out through his long lean fingers.

Dusk morphed into night. Prof. Carver was unaware of the passing of time. He sank into a trance. He had not become a

painter or musician as predicted by his friends in Simpson College. Then what has he become? A Southern farmer? No, he had only become a teacher in a struggling village school, a painter and a 'doctor' of roots!

Were all these merely mean achievements? He had transformed an arid land into a land flowing with milk and honey. He had helped cotton planters in Alabama untie their blinkers made of dollar notes and see the world with open eyes. Like him they could also see God in nature. 'Could all these records be called failures?' He felt that all those were just a beginning... 'I have to walk miles before I sleep.'

He kept on playing on the key board until his fingers got tired out. He stopped. Listening to the footsteps behind, he looked back and saw that someone had already lit a lamp in the room. A number of students were standing at the doorsteps to listen to his piano recital. When he was about to get up they requested him in a chorus to go on playing.

"Sir, how nicely do you play on the piano!" He was indeed embarrassed and hurried to leave.

"Sir, please go ahead with more recitals. We have never heard in our lives such sweet classical renditions."

"My children, I am not at all a good musician."

"Is it not you sir, who had told us that if there is something good in us we must share it with others?"

By the time the bell rang for dinner. Every one went to the refectory. Prof. Carver went to his room. He mused:

Tomorrow morning I will have to discuss this subject with my Father. Agricultural activities in Tuskegee were gaining momentum. Yet, the financial crunch in the day to day running of the school continued as bad as ever. Since Prof. Carver's agricultural experiments were a crowning success, more land was allotted to him for further expansion. Due to the paucity of funds most of the ongoing projects began to fall through.

As usual, Dr. Washington scouted around using his excellent

oratory skills to collect funds. Admittedly, Prof. Carver did not have such a mesmeric tongue. He now re-discovered his dormant talents of playing the piano and singing. The students' appreciation of the same on the other day encouraged him. A novel idea began to bubble at the back of his mind.

Soon, Prof. Carver submitted a proposal to Mr Warren Logan, the treasurer of the school trust. The proposal sought financial support to form an orchestra group that would tour various states and raise enough fund. Mr Warren Logan was an admirer of Prof. Carver and without much hesitation sanctioned the necessary amount for organizing the troupe. According to him Prof. Carver was a no-nonsense man from North who had successfully hit the bulls eye of all his targets in the past. He was sure, that even this venture would achieve its desired results. Relying on Prof. Carver's proposal, Mr Logan chalked out the modalities of the tour.

Prof. Carver began practicing on the piano during his free time. He never ceased to amaze his students and they in their turn were getting ready not to wonder at the fresh surprises sprung up by their professor each time.

The orchestra toured the states as planned and successfully collected sufficient funds. Prof. Carver had a bonus from those tours. He could see first hand the Southern States of America and the extent of the woeful existence of his black brethren who were pounded by poverty, ignorance and neglect.

Even at that time, the Southern whites considered slavery a natural state of affairs. A wrong notion that the blacks were a low race, still prevailed deeply in their minds. Even after the emancipation declaration, the blacks were denied social equality. They were segregated in public places, public transport and even in public gardens. If a black crossed the path of a white man or overtook him along the road, whipping was the punishment. He had to sidetrack from public thoroughfares to make way for the white man to pass

A black who had achieved education through his hard work and tried to set up a business through his own skill had to contend with stiff opposition. Any black who had dared to step forward had to face the whiplash. The black that dared to keep 'Mr' or 'Mrs' before his or her name had to face the wrath of the whites.

All avenues of justice were closed for the blacks. Where had they to go for redress when they were wronged? The 'goddess of justice' too belonged to the whites. Needless to say that in the absence of justice, security was a mirage.

It was the destiny of the blacks to live a poor life all the while wearing the mask of an artificial smile and suppressing the creeping pain of oppression. The rudderless black communities drifted like shadows along the sidelines of life.

For an empty justification, the Southern whites would say:

"Look at 'our' black man. Don't you see a smile on his face always? Who says that he is unhappy with slavery? Slavery is natural to them and they are happy with it"

Vast majority of blacks were landless farm labourers. They lived in tottering wooden huts. They had to do a hard day's toil to keep their bodies and souls together. Dozens of them had to pack themselves under one roof. Taking their food in their hands they had to eat standing or leaning against walls or boulders that were strewn around. Persons of all generations slept together on bare floors. They had no idea of windows and windpanes or curtains. In most of the huts there were no facilities like toilets or bathrooms. Even where they had these 'facilities' they were mere crude enclosures made of broken wooden planks covered by tattered gunny bags.

They had to bring their provisions from far away markets. Meat, meal, and molasses were the usual staple. They were so ignorant that they did not grow vegetables and farmed poultry, pigs, ducks etc. around their huts to supplement their food needs. Due to, malnutrition and deficiency in vitamin contents in their

food they were continuously attacked by diseases like pellagra and scurvy.

Since they had to bring drinking water from far away places, they used to drink water only in limited quantities. It is better not to speak of the use of water for sanitation. The result was inevitable. Their skins got cracked. The earth cracked too. When storm water hurtled down from the roofs of their huts, the soil there got eroded forming clefts as deep as twenty feet. Yet, no one seemed to bother. This population was living on the brink of extinction.

After returning from the tour, Prof. Carver's attention turned to another direction. A novel programme of 'awareness creation' was gestating in his mind. 'I have to create more awareness in my brethren. This is my moral responsibility.' Prof. Carver laid bare the details of his new venture before Dr. Washington, "If they are to be taught what kinds of crops they have to cultivate, how to cultivate them and what to do after harvest... how to construct houses, Tuskegee has to go to their door steps." It would only have been a wonder if Dr. Washington had disagreed with this proposal!

The first 'Mobile Agricultural School' was born in the year 1899. Prof. Carver planned his programme well in advance and arranged all exhibits on hand cart with personal care. He set out on his new venture with the help of a carefully handpicked band of students. Tuskegee school moved into the courtyards of the farmers. . .they moved from major villages to the tiniest settlements in the rural heartlands of Alabama. In order to explain effectively the experiments in soil and water, they had to carry some lab instruments with them. Prof. Carver designed a new handcart for arranging those simple instruments. He and his assistants talked to the villagers on matters of agriculture, health and hygiene from the depths of their hearts simultaneously exhibiting and demonstrating their models.

Prof. Carver stayed with his poor brethren in their

inconvenient huts during these tours. His humility, soft-spokenness and natural affection endeared him to the villagers and it enabled him to interact with them more freely and come to know their problems. Prof. Carver utilized such informal and relaxed moments to disseminate among them fresh knowledge on the various aspects of agriculture such as how deep should one plough the land, how to sow the seeds, how to tend to the fields after cultivation, etc. were thoroughly discussed during those moments.

Wherever he went, Prof. Carver was particular to advise the farmers to keep their backyards reserved for vegetable cultivation. He told them in simple language that those easily cultivable vegetables would free them from the grip of the traditional three 'Ms' such as meat, meal and molasses. To get rid of scurvy and pellagra which were due to malnutrition, he advised them to eat raw, leafy vegetables and fruits like tomato in larger quantities. There was a wrong notion prevalent among the Southern farmers that tomato was a poisonous fruit. Therefore Prof. Carver and his associates had to eat raw tomatoes to remove this wrong notion from their minds. They advised the farmers to sow pulses. It was required to increase the fertility of the barren land.

They used to take the produces from the experimental farm of the school like potato, cabbage, onion, watermelon etc. and convince the villagers about the virtues of proper methods of cultivation. On such occasions they used to distribute among the villagers good quality seeds. Mr James Wilson who became the Secretary of Agriculture of the United States of America provided a major quantity of those seeds.

Prof. Carver elaborated on the merits of rotation of crops, "How sumptuous and rich were the cotton harvests during your childhood days? How did they become so lean now? Have you ever given some rest to this soil? Don't you feel the need for a rest after a hard day's toil—?"

A farmer would cut in and ask, "Okay sir, if we give such rest to the soil what will we feed our children with? Mud.... Eh?"

"Why should they eat mud? I am now giving you seeds of sweet potato. This would be more than enough for cultivation in ten acres. The crop you get from this would suffice for a year's consumption. Even your pigs can grow eating the leaves and their stalks. In a year you can have two consecutive harvests of sweet potato crop. That wouldn't harm the land at all. Even if you cultivate cotton in the same small ten acre field, after three years you will witness in one harvest a yield that would match the total yield standing in the whole field now."

Again there would be a dissenting voice from another farmer, "Son, have you got so much experience as to teach me? Do you pretend to know more about agriculture than I who spent almost my entire life in the fields? I have burned out three fields. Now you tell me. Don't you?"

Oh! What manliness! What pride!

If Prof. Carver came across sick hens in some one's courtyard, he would immediately check the hencoop.

"Do you know why your chicks get sick so often? It's because this cage doesn't get enough warmth of the sunlight. It is the dampness inside the coop that makes them sick."

"Prof. Carver, that is not the reason. These eggs were hatched on a full-moon night. That's why they are sick."

Oh! Now this superstition.

Such rebuffs never disheartened Prof. Carver. He used to convince them with the correct scientific truth. Some enlightened soul would come forward and change the pattern of farming as per Prof. Carver's instructions. Neighbouring farmers would witness his benefits. Then they too would follow Prof. Carver. That was sure. Prof. Carver was cultivating soil and mind alike without getting tired and disheartened. Those who cultivated according to the directions of Prof.

Carver, had nothing to lose. On the contrary, they would stand to gain a lot.



Prof. Carver used to move around Macon County on almost all holidays with his handcart. He halted at fairs. Setting up counters in a corner he would give speech. Generally people would listen to him peacefully. Occasionally a white roughneck might stick in and brawl, "From where has this Negro come now to teach us?"

Prof. Carver, of course, would ignore such insults. In the beginning those ignorant farmers thought this learned Professor's thoughts might be beyond their grasp. But once when they heard his talk, their prejudice would vanish in thin air.

Prof. Carver found a spot to halt his handcart where people would gather in large numbers—Church. Carver and his colleagues would be ready when the congregation would come out of a particular church after the service. The faithful would gather around the handcart to listen to Prof. Carver's 'sermon'. Some of the thoughtless faithful and pastors, who had no socio-economic concerns, criticized and disturbed these sessions. According to them the Lord's Day should not be defiled by such 'eccentricities'. Some of the whites that disturbed these sessions had their own reasons too.

'How do these blacks who lived under our mercy until yesterday dare to preach to us today? What does that mean? We don't want such blacks here who can do agriculture better than us.'

In fact the economic conditions of the poor white farmers and the blacks were almost similar. If it were before the 'emancipation' they could have easily suppressed the blacks. Since they too had now equality in front of law, it had become really difficult to suppress them. If they cultivated their lands according to the new methods as this scientist had been

recommending, in all likelihood these blacks would go ahead of the poor whites. How could they tolerate such a development?

Yet, it should be acknowledged that all whites were not of this frame of mind. Whites of goodwill and a good number of priests turned supporters of this mobile school. These people attended many such demonstration-cum-instruction sessions.

Prof. Carver had a non-partisan attitude towards everyone. All Southerners were facing similar problems. All were to be saved from destruction.

His *mantra*, 'Start from where you are, with what you have, make something out of it and never be satisfied,' was for the whole South to chant.



Slowly but steadily, Prof. Carver was able to change the food habits of the Southern people. Carver taught them how to desiccate and preserve vegetables and meat for a long period. He had advised the people to eat certain vegetables and fruits raw in order to compensate the vitamin deficiency in their food intake. This advice of Prof. Carver to people came much before medical science began to realize the potential benefits of eating vegetables raw.

Prof. Carver supplied the farmers with high quality seeds. He taught them how to prepare palatable food with their agricultural yields. Pickles and jam became a part of the daily menu of the Southern villages. He taught them how to extract juice from ripe fruits, dry them and make into dough form in order to preserve them for a long period.

The food habits of people are traditionally formed. Only an attractive and palatable substitute could replace them.

Of late Prof. Carver developed a new hobby of experimenting with various recipes and then testing the vitamin content in them. In fact there was no other way for him to get an opportunity to taste good quality European food. He kept on

trying to bring variety and quality in his recipes that brought about substantial changes in the quality and style of food intake in the entire South.

Prof. Carver had a never-ending agenda for his awareness campaigns. He had to teach people how to clean clothes, how to maintain personal hygiene, how to stitch curtains, and a number of other related subjects like child-care, animal husbandry and poultry farming. Further, he persuaded the farmers to make three wooden steps in front of their houses instead of a single large wooden-log. He taught them how to construct water closets. He also taught them the art of making cheap but durable blankets from the fibre of plants and how to make paint from Alabama's soil to paint their huts. Prof. Carver sowed the seeds of such arts in the life of those simple people.

Prof. Carver printed leaflets containing several useful instructions that benefited the farmers. They were in a very simple language for the information of even illiterate farmers. Officials of the Agriculture Department ensured their effective distribution even in far-flung settlements. The topics of the leaflets were such as how to sow peanuts, 105 food products from peanut, how to grow tomato, 115 food products from tomato, how to protect sweet potato, piggery, cattle breeding in Alabama, how to preserve meat by salting and desiccating it and how to enhance and sustain the fertility of soil and the like. Besides, he convinced the farmers that if they could save 5 cents per day, at the end of three years they could purchase three acres of land each. This was enough of a green signal for those poor farmers to start eagerly filling their earthen pots with five cents every day. At the end of the year several land dealings were successfully effected.

'Ownership of private property' enhanced the farmers' self respect. The landlords' grip on them gradually began to loosen. There was a feeling that economic self-sufficiency was at a hand-shaking distance.

Prof. Carver knew well that the cultural future of Southern farmers would only begin with their economic self-sufficiency. The nation's progress largely depended on an overall progress of the farmers. Prof. Carver directed his research efforts to give a fillip to this vision. In order to develop their own culture ordinary farmers had first to attain self development and bring transformation in their lives.



Prof. Carver's simplicity and homely behaviour endeared him to the Southern blacks. In course of time they abandoned the 'outsider' tag on him from their minds. They were impressed by his humble behaviour and simple style of conversation.



Prof. Carver would take special care to pack the tools and exhibits each time when the mobile agricultural school toured the villages. He was ever vigilant against loss or misuse of any kind. There were reasons behind this vigilance. He considered himself a representative of Tuskegee institute and the tour as an activity of the institution. Those who were eager to know more about his agricultural products began to keep aside their old reservations. Thus, he came to be invited to traditional fortresses that once considered even the shadow of the blacks untouchable.

During his hectic tours, Prof. Carver could train an able student as his assistant. His name was Thomas Campbell. Later, he would become famous as the first black Field Agent in USA. How Prof. Carver found this young student is a different story. Thomas Campbell's elder brother Willie was already a student of Tuskegee. Leaving his parents in the village of Athens in Georgia, Thomas came to his brother in Tuskegee traversing a distance of two hundred miles. This was in spite of a sound warning from his brother that Tuskegee and its environs were then under the grip of small pox.

"Who bothers about such minor matters?"

It was high time when they met in Tuskegee. Willie was severely affected by small pox and was counting his last moments. He told his younger brother:

"You bury me here itself. Continue to stay here and spare no efforts to achieve the targets you wanted to. Let no one outpace you in your efforts."

After his brother's death, Prof. Carver found a grief stricken Thomas drifting along in Tuskegee. He was sad and dejected. Prof. Carver called him affectionately and inquired about his well being. He asked Thomas:

"Do you like farming?"

"No." He had been working in the fields all along. He had decided to learn some trade like his brother did. Could be blacksmith's trade, carpentry, wood work or hair setting. Prof. Carver liked this well built, suave and slightly serious natured youth.

"Very good! Do you like to learn agricultural science?"

'Oh God! That seems to be a hard nut to crack. Can't even pronounce the word properly. Still it seems better than working in the fields.'

"All right. I must study something different like that. If it must be agricultural science then so be it...."

And, of course, he never had to regret this decision in future. Not even once!

Learning agricultural science with Prof. Carver was a unique experience. It was quite different from merely toiling in the fields from morning till night. This youngster who dared ask 'why', going beyond the questions of 'what' and 'how', became an asset to Prof. Carver's mobile school.

There was hardly any one around at that time who was not familiar with the regular scene of a lean Carver and hefty Thomas trudging along their way to the villages. Often pushing their handcart and occasionally carrying their exhibits on mule's back

they criss-crossed hills and valleys to reach far flung settlements where even horsecart could not reach.

As a result of Prof. Carver's ceaseless efforts the 'heavenly Ganges' descended amidst the poor Southern farmers. It was a flux of knowledge.... a flux of prosperity! Southern states, which were under the orbit of the mobile school, were totally transformed. It was heartening to see a long suppressed generation rising up by shaking away their shackles with an enhanced standard of living! Prof. Carver's mobile agricultural school was responsible for this unprecedented transformation that took place in the Southern States. The self respect of the farmers rose to a high.

Dr. Washington congratulated his worthy colleague for his great works. The mobile school caught the world's fancy and soon plaudits began to pour in from countries like Russia, Poland, China, Japan, India and some African nations. They wanted to discuss about the activities of the mobile school keeping in mind their own indigenous circumstances. Invitations for lectures poured in from various places. The world was awe stricken by Prof. Carver's intelligence and ability for fundamental research.

Tuskegee's efforts came to fruition. The school became prosperous and along with it the town too. Movements of goods and hands to and fro Tuskegee picked momentum. In order to facilitate this process, the railways had extended an extra line from 'Chehaw' station to the school.

Dr. Washington made an attempt to hike Prof. Carver's salary. A selfless Prof. Carver politely declined the offer:

"What am I going to do with more money?"

Perhaps he is right. What is the role of money for a man who has inherited the whole earth?

Dr. Washington never missed an opportunity to praise the colourful achievements of his selfless and humble colleague. Once he said in a large gathering:

Definitely, Prof. Carver is one of the greatest men this

country has begotten. Wish we had half a dozen George Carvers!



Prof. Carver always felt gratified by the fact that he conceptualised and implemented the mobile agricultural school for creating a social awakening. 'The most important work in my life,' was what Prof. Carver used to say about this mobile school. The green revolution released by this unique venture pulled the Southern farmers up from below the poverty line. It gave their lives a new meaning.

Gradually this mobile agricultural school activity was expanded. In 1918 the Alabama State Government presented a large truck to the school for this purpose. When this truck had it's maximum run and was obsolete, the farmers of the locality collected five thousand dollars and purchased a bigger truck for the same purpose. Now, one can imagine how much value they attached to this mobile school movement.

Alabama, which lies in the south-eastern direction of America, was once rich in population, mineral deposits and abounded in forest wealth. People neglected the natural resources to a great extent. Therefore, it had turned into an accursed land due to the 'ambition' of the cotton barons!

The recurring eruptions of racial rivalries added insult to injury. At this juncture, Prof. Carver continued his research efforts to find solutions to the problems vexing the people of the South black as well as white. His research was aimed at making the South self supporting. To fulfil that he brought his laboratory to the fields and to the threshold of farmers' huts. The 'Ganges of Knowledge' began to flow into the villages.

Prof. Carver's social work soared beyond the limitations of space and time. He had no private life that could be called his own. He remained a bachelor life-long so that married life should not be a stumbling block in the way of his social service. His

brethren needed him not for entertainment but for their upliftment. He did not allow any other concern to come in the way of that commitment.

During the American Civil War (1861) the literacy level of the blacks was a mere 3% and by 1910 it rose to 70%. Yet, Dr. Washington and Prof. Carver did not rest under their laurels. They continued to do further experiments in education.



Dr. Washington's message to students passing out of Tuskegee school was, "Go back to village you have come from. Never waste the precious time that you have at your disposal by trying to find jobs. Work even if you do not get a wage and never waste an opportunity to work."

Having been edified by this advice of his principal, Prof. Carver spent his spare time in 'Agricultural Reform Programmes' during major vacations accelerating their momentum. During one such vacation, Prof. Carver wrote an article titled 'The fungi of Alabama'. During that period, he sent about one hundred samples of mushrooms to an exhibition conducted by the Agriculture Department. In continuation to this, he published several research reports on various medicinal herbs.

During a subsequent vacation Prof. Carver got an occasion to attend an All American Medical Congress held in Washington as a collaborator. An essential agenda in the congress was to prepare an exhaustive list of medicinal herbs found in America. Prof. Carver too contributed his might in that he gave enough information about a selected number of medicinal herbs with samples.

Many of the experts gathered there did not even know the names of many of the herbs exhibited by Prof. Carver. If they were ignorant of their names, less said the better about their uses!



CHEMURGIST

It was boom time for cotton crops all over the Southern States. Besides deeply ploughing the land this time, the farmers tended and nurtured the crop according to the directions of Prof. Carver. Due to the introduction of rotational pattern of crop cultivation, the fertility of the land had been enhanced.

The farming fraternity had full trust in the words and deeds of their 'Professor'. They were convinced that his dreams were for their sake and that his research was centered on improving their lot. Any needy farmer could have had an easy access to the laboratory in Tuskegee at any time of the day. They could meet Prof. Carver and seek clarifications by listening to him or by observing his experiments. Gradually, cotton prices soared up to an all time high in the neighbouring markets. An early spring began to bloom in the hearts of the Southern farmers. They heard in their dreams the uproar of raining money!

Alas! One morning they were shocked to see mighty waves of misfortune sweeping the Southern plantations. Those who saw the spectacle were stunned. A whole white expanse of ready to be harvested cotton crops which they had left quite alive and kicking the previous night lay in the morning mowed down in mud! Half-inch long boll weevils, the deadliest of cotton pests in Southern parts of America, had mercilessly hacked the cotton buds of a number of plantations, nay the hopes of farmers, by one night. The unexpected calamity robbed hundreds of farmers the means of their livelihood.

Soon a blizzard of lamentation erupted from the throats of the hard hit farmers. An echo of the painful clamour reached Prof. Carver. Long back did he know the destructive potential of the deadly weevils, who ran amok in the South. And he knew the reasons why Tuskegee was spared.

For the past several years Prof. Carver had been researching on peanuts. It is this peanut cultivation that had come to the rescue of a whole cotton harvest in Tuskegee. It was in the year 1904 that these pests entered Texas from Mexico. After devouring the cultivation there, they reached Alabama in 1910. In order to destroy the larvae of weevils, strong pesticides made out of a mixture of 'calcium arsonate' was needed. Poor farmers could not afford such costly chemicals. Further, the larvae of this pest could be destroyed only if the land is ploughed deeply.

The area under cotton cultivation had to be reduced. Then only it would be possible for a common farmer to face and control such calamity. In the remaining field crops like legume, peanuts and sweet potato have to be grown. Those crops would enrich the soil, resist the pests and suffice the food needs. Before advising them for the rotation of crops, it was necessary to test the quality and virtues of peanut and sweet potato. He had to find out and ensure their uses as food and industrial raw material.

Prof. Carver learnt from his research findings on peanut, that it was the tendency of larvae to grow on a particular kind of crop where they could thrive vigorously. If a different crop is cultivated there immediately after harvesting the earlier one, those larvae starve to death as the new crop does not play host to them. Biological control is maintained by bio-diversity. If a particular crop were cultivated on the same land continuously for many years, the larvae that kept up their dwellings would become stronger day by day. Their 'empire' expands within the crop and they could soon topple the fragile ecological balance in the area. The consequences would hit hard the illiterate and ignorant farmers.

The attack of weevils on Tuskegee was halted on their track by the rotational crops of cowpeas and sweet potato! Prof. Carver tried to convince the shaken farmers of the South that if they cultivated peanut immediately after cotton crop, the immunity as well as fertility of the soil would be boosted. Subsequent crop would largely benefit from it. But how would these ignorant farmers easily accept the proposal? To them, peanut was fodder for pigs. At the most, a handful could be salted for children's pass-time. But, Prof. Carver would not leave anything half backed.

When rich farmers shied away from the cultivation of peanut, one could not expect the poor farmers to cultivate the same crop. Prof. Carver found a solution for this too. With Dr. Washington's help, he invited ten prominent farmers of Macon County for a lunch. Prof. Carver and a few students skillfully prepared food for the guests. The menu included soup, chicken curry, vegetable dishes, bread, salad, ice cream, sweet meats and candy. At the end coffee was served.

The guests liberally complimented the host, "The food served was nutritious and wholesome."

At this juncture Prof. Carver let the cat out of the bag. The guests could not believe their ears when they heard that all the items in the menu were made purely out of peanuts. Could one believe that even the chicken was mock?

Gradually, the aversion for the humble peanut began to wear off from the Southern farmers' minds and a new interest was born in its place. There was the threat of locusts and larvae on one side and Prof. Carver's protective crops on the other. Farmers chose the safer option!

Prof. Carver published a leaflet, which described all features of the humble peanut in detail. The most common use of peanut, its nutritive value, various high proteins contained in them, a high quality oil that could be extracted from peanut, the way its leaves and stalks could be used as animal fodder, how the

cultivation of peanut could enrich the soil, and many other useful information were included therein. The language of the leaflets was simple and intelligible even to the common farmer.

These leaflets hit the mark beyond expectation. Consequently, a few sensible farmers got together and discussed the topic intensely. Accordingly, they cultivated peanut and drew a rich harvest. Farmers could sell their peanut yield in Northern markets. They made ice cream, cheese, cake, and other sweet meats using the excess yield and preserved them for later use under the guidance of Prof. Carver. Seeing the benefits reaped by these farmers, others began to join the fray. In the next harvesting season they too reaped a high yield.

The peanut consumers in the North were only familiar with the salted variety. Since the Northern consumption was limited, excess yield of peanut remained stacked in Southern godowns. The price of peanut abruptly slumped in the market and voices of clamour echoed in the horizon once again. There seemed no immediate let up in this unprecedented development. Farmers all over the South, began to rain blame squarely on Prof. Carver as if he had done nothing good for them so far. Some white farmers who blamed him did not forget to abuse him with a 'Negro' tag with his name.

No sooner did Prof. Carver exorcise one 'demon' than another one waited on his doorstep! He made a whirlwind tour of the nearby fields and got a first hand glimpse of the frightening face of the new 'demon'. Each and every courtyard was overflowing with heaps of peanut. In some places they had already begun to rot emitting a foul stench in the air.

'If it was to be left rotting like this, what was the use of our cultivating peanut?' Clamours of the elderly were more heart renting.

'As I have predicted, you have got a bumper crop. What you do with it is entirely your concern.' Prof. Carver was not a man to shirk his responsibility with such twisted arguments. His tasks

were not so easy to fulfill. To cultivate the nutritious peanut crop was a better option to loosen the grip of cotton on economy. Peanut had to be commercially at par with cotton. Prof. Carver thought that it was his duty to create for peanut a high demand in the market.

Prof. Carver shut himself in his laboratory. He put on his usual jute-apron and plunged into research in the presence of his 'Father'. Prof. Carver scooped a fistful of skinned peanut seeds. First he ground it into a nice flour. After heating it he crushed it in a hand driven press to extract oil. He got a small cupful of oil. Then he heated the oil in different temperatures and tested its efficacy. The result was beyond expectation. He did not see in it the usual anomalies seen in animal fat. He found that this peanut oil could be easily utilized to manufacture soap, margarine and could be an ingredient in many kinds of cosmetics.

Keeping aside the oil in a different cup, Prof. Carver poured some water into the remaining sediments. Then, after heating and stirring the vessel he tasted the concoction. A pinch of salt and that much of sugar was added into it for taste. Good! Now a tasty milk was ready. Though there was some peanut stench that could easily have been dealt with. The 'peanut milk' was not far behind cow milk in quality. One glass of milk was available from one scoop of peanut. He continued to do a ceaseless series of experiments. Most of the time he returned the food that was brought to him. If anyone anxiously knocked at the door, the reply would be, "Please don't disturb us."

Days passed and on the sixth night he emerged from the laboratory, went to his room and took rest for sometime. Early next morning he took with him a few students and went to the laboratory. When they accompanied him, they were sure of witnessing something extraordinary. The students were amazed at seeing some two dozens of attractive items arranged on the long table there.

Prof. Carver prepared all those items by first disintegrating

the various substances from peanut and then synchronizing them in various combinations. Some of the items were: fat, resin, sugar, ink, boot polish, dyes, shaving soap, fertilizer, soft and shining paper, artificial tiles, grease, butter, plastic, milk, cheese, cosmetics, shampoo, vinegar, instant coffee, quinine substitute, wood paint, anti-dandruff lotion, cooking oil and the like.

The remarkable feature of Prof. Carver's research was that all the items he thus gifted to the world were products of peanut that would support basic human life.

Prof. Carver said:

God has given us three domains. They are animal, vegetable and mineral kingdoms. One more kingdom is added now—the synthetic kingdom. In the fourth kingdom we will see that synthetic products are made by integrating various substances found in nature. In order to protect life on earth, man has created three kinds of alterations. At first man started to live on naturally available yields from nature. In the second stage what man did was to use the yields effectively to serve the needs arising in course of time. In the third step man alters the naturally available resources and then reconstruct them partly or fully to make an entirely new product. The horizon of creation thus begins to expand.



The agro-based economy of the South received the support of industrialisation. In order to spur productivity, to suffice the need of machinery, to maintain the economic equilibrium and the needs of advanced agriculture the services of the new industries were required. Prof. Carver was convinced that agro-based industries were absolutely necessary for the over all progress of Southern states. He continued his research on peanut, cotton and the soil of Alabama as the raw material for industries.

An entirely new branch in science was born by the process in which substances were separated first by chemical analysis

and then again by combining them to create entirely new products. That was chemurgy!

Chemurgy means active chemistry.

Ms Christy Borth writes in her book 'Pioneers of Plenty', 'Prof. Carver was the first and foremost chemurgist! Twenty-five years ago, when this branch of science was not yet named, chemurgy was born in Prof. Carver's laboratory in Tuskegee. Plastic, synthetic marble tiles and plant based materials developed by him amply testifies to this fact.'



Though the primary purpose of agriculture is to produce food for consumption, many agricultural products are useful as raw materials for industrial production. Plants contain certain chemicals and chemurgy, which has developed as a branch of chemistry, becomes relevant here. Prof. Carver's chemurgy brought about reforms in agricultural techniques and production. The farmers of the South turned busier in cultivating these agro-raw materials. They too became partakers of Prof. Carver's mission to dig out the 'hidden' treasure from earth.

Prof. Carver's dream began turning into reality, "In the secure near future the laboratory will go into the fields and co-exist there with agricultural products."

Prof. Carver's works expanded to a large extent. Following his foot steps many became agricultural scientists. Many more research centers and laboratories were established by the Agricultural Department. Prof. Carver's works gained supreme importance in Tuskegee.

Agricultural technology was becoming advanced day by day. Scientists from different parts of the country and even from abroad came to Prof. Carver to seek his advice and exchange ideas with him. The wall of colour-racial prejudice began to crumble.

The bulk of letters coming to Tuskegee began to mound

up. In order to manage the inflow of a huge quantity of mail to the school, the Postal Department had opened a sub-postal branch in the campus.

'The Peanut man, Tuskegee,' that was enough address for the letters to reach Prof. Carver.

Once, seeing the bulk of letters on his table, a visitor from the North said, Prof. Carver, how much is the society indebted to you! It is indeed a great service that you have done to humanity!"

"My son, I am only assisting God in this service. Since God has chosen me to do this service I believe that it was man's welfare that was paramount in the Divine plan and not the complexion."



The farmers of Coffee County (Alabama) became bankrupt due to pestilence of weevils. Courageously following Prof. Carver's advice, they cultivated peanut in 1915. They dared to change their crops and techniques. Within four years Coffee County was totally transformed. They experienced an unprecedented prosperity. The farmers of Coffee County opened in 1919 a factory to shell peanut in one of their prominent towns. As a gesture of thanks-giving they installed a life-size statue of Prof. Carver in the village square. The plaque at the foot of the statue reads, "This monument is erected as a gesture of thanks-giving to Prof. Carver who had studied the destructive potential of the 'we evil pests' and saved us from potential calamity."

Prof. Carver's experiments and research did not end with peanut. His attention turned next to sweet potato. They were sure that Prof. Carver would never mislead them and enthusiastically they got engaged in the cultivation of sweet potato. There was huge yield of sweet potato. Again the same problem. No market for the yield. The excess crop was dumped in the courtyards and warehouses. Once again, the harried farmers clamoured their usual refrain. This time Prof. Carver

anticipated the calamity and was better prepared. He engaged himself in research to counter it. As usual he shut himself behind the closed doors of the lab and a chain of experiments ensued. He succeeded in making about 120 items from sweet potato. Some of them were: flour, starch, biscuit, dye for clothes, silk, vinegar, ink, artificial rubber, etc.



The year was 1917. The American army involved in the war faced an acute shortage of wheat flour. Somehow the army authorities got wind of the fact that the Tuskegee laboratory succeeded in making 'loaves'. They summoned Prof. Carver to Washington. Once there, he made a presentation of the salient features of sweet potato in front of the Army authorities. It included the vitamin contents and the various uses of sweet potato. He further elaborated on how sweet potato could be preserved for a long time and how biscuits and 'loaves' could be made out of its flour with practical demonstrations.

Prof. Carver said, "These items are not mere food 'substitutes' but serve as complete food. Much of nutritional deficiency in food can be compensated by these." A hundred pounds of desiccated sweet potato powder could easily be contained in a small tin and preserved for longer period. Once the authorities were convinced of the advantages of sweet potato, they planned its large-scale production after the war.

Thus, due to the research efforts of Prof. Carver, a black scientist, a great tragedy that would have adversely affected the American Forces serving the First World War was successfully averted at the nick of time. The food shortage of the American Army was permanently solved. The Southern farmers' problem of excessive harvest too got solved in one shot!

The quirks of destiny are strange indeed! Before getting an opportunity to savour the joy of the latest achievements of his worthy colleague and pat him on his shoulders, Dr. Washington

left for his heavenly abode (Dr. Washington died in 1915). He had done one good turn for Prof. Carver farsightedly. He had already directed the institution to free Prof. Carver from teaching activities and allow him to pursue his full-time research activities unhindered by any other responsibility. Dr. Washington firmly believed that a man's capacity to work should not be obstructed in any way. Such distractions on the way would hamper the quality and quantity of his productive output. Dr. Washington knew very well that the school responsibilities on the shoulders of Prof. Carver were deterring his whole-hearted involvement in research activities. Dr. Washington created an independent research centre for agriculture and appointed Prof. Carver as 'Director, Research Center'.

Prof. Carver informed his former Professor James Wilson about this appointment. He was Secretary for Agriculture, USA, in 1910. Prof. Carver received a quick reply,

The science that has got no practical utility in daily life, is a dead science. The knowledge one gets through research findings should be utilized for the progress of the nation and ultimate welfare of humanity. I remember asking you once why you were running after agricultural sciences after neglecting arts subjects. I also remember the spectacular answer you had given me, 'It is only the agricultural sciences that would be of help to my brethren.' How can a teacher ever forget such a definite answer from a brilliant student like you? You have now in your hands a golden opportunity to serve your brethren well. I have no doubt that you will fulfill it. I don't get surprised about all your great achievements, as I know your aptitude for meticulous research. It will not allow you to rest with your laurels. I am aware of the great and shining inspiration in you.



"SON, YOU HAVE GRATIFIED US"

Prof. Carver travelled once again to Missouri in the month of July 1908. Years had passed after he had last visited his roots in Diamond Grove. First, he spent a few tearful moments at the tomb of his elder brother Jim. No one but he knew what were his feelings.

He spent one night in Aunt Maria's house. When she heard from George that he was word-bound to her fond counsel to him during his previous visit to Neosho, she recalled her own words with satisfaction:

"Son, learn more, nay much more, and use that knowledge for the upliftment of your"

From there, Prof. George went straight to Diamond Grove. Uncle Moses had crossed ninety and looked much tired and disabled due to his advanced age. Aunt Suzan had already passed away. George's home coming had kindled some measure of joy in the old heart of Moses. George's presence reminded Moses of Suzan and the good old days....

'Suzan should have been here now. Was she not a mother to him? It was her sacrifices that had saved the boy from....'

One night elapsed sinking and swimming in past memories. In the morning, it was time for George to bid farewell to Uncle Moses as well. Disappointment was written on those tired old eyes. He struggled for words:

'George... then a bundle of bones packed in a skinny bag! He had left home for knowledge some thirty years ago. He has

come back and is presently standing here in front of me...as a world famous scientist. He stands here straight in gait and knowledge!'

Teardrops trickled down from his dim eyes. And then Moses said, "Son, where you wanted to reach, there you've reached now. You deserved it. I am proud of you. Your aunt deserved all the more to partake the glory of this day.... but.... Son, you have gratified us!"

This was their last meeting.



'I AM NOT MINE'

In the year 1916 the Royal Society of Arts, London honoured Prof. Carver with a fellowship. World famous essayist Henry Johnston in his autobiography as well as in his book titled 'The Negro in Modern World' wrote appreciating and evaluating Prof. Carver's handiworks. It was these writings that had introduced Prof. Carver to the British readers. Perhaps this knowledge might have inspired the authorities of the Royal Society to honour him by conferring on him a fellowship.

In the year 1921 Prof. Carver made use of an opportunity to attend a meeting with 'Congressional Ways and Means Committee' representing the 'United Peanut Growers' Association'. The purpose of this meeting was to table a resolution pertaining to octroi on imported peanut before the Congressional Committee. The peanut farmers formed this association in 1919.

Peanut imported from China, Japan, and some other Asian countries were available for a lower price. They could afford to export their peanut cheaper because labour in those countries was cheaper than that in USA. Moreover their import tax was highly subsidized in USA. Consequently the American peanut remained stagnant in barns and warehouses in the absence of proper market outlet. In order to surmount this stalemate it was quite necessary to create a proper awareness in the minds of the state authorities regarding the commercial possibilities of American peanut.

Who else in America was more competent to play this role than Prof. Carver? Yet, there were some hiccups from some white farmers. A Georgian white farmer said:

"If we have to learn lessons in commerce from a Negro, we are really worse off now."

The meeting regarding this was to be held at Montgomery in 1920. The association had invited Prof. Carver for the meeting and he did not miss a golden opportunity to talk about his dear peanut to the authorities concerned.

Accordingly, Prof. Carver packed two cases with samples of various items made from peanut. He reached Montgomery City Hall alone in a sweltering mid-day on 13th September 1921. In both his hands he was carrying two heavy cases containing bottles filled with samples and food products. His shoulders were aching. He was very tired and his coat was heavily drenched in sweat under the sultry afternoon sun. Prof. Carver was a little late to reach the city hall. After waiting for some time, the office bearers of the 'United Peanut Growers' Association' had gone to a nearby hotel for lunch. Prof. Carver went to the gates of the hotel in that scorching heat, but the security halted him there.

"Blacks are not permitted here."

Prof. Carver lowered the heavy cases. Profusely sweating all over, he was shaking with hunger and thirst. He was over sixty and somehow managed to stand on his legs. He didn't argue with the security. He said:

"My name is George Washington Carver. I have come here to attend the meeting conducted under the aegis of the 'United Peanut Growers' Association' on an invitation. It would be very kind of you if they are informed of my coming here."

The security brought the matter promptly to the attention of the association members. He came back and took Prof. Carver through a back door and made him to stand there saying, "The peanut growers are taking their lunch. You are asked to wait here for some time."

Reminiscing on this gross humiliation Prof. Carver said once: Unable to bear the shame and pain of the humiliation and crass negligence, I thought for a moment to quit the place with my cases. Am I not a human being too? Do I not have a human dignity? Instantly another thought began to assuage my wounded feelings and soothed my ruffled feathers. After all I had gone there neither for my personal gain nor for the promotion of big businessmen or industrialists. On the contrary I had been there to argue for a better deal for small peanut farmers who trusted me. Any favourable resolution would only benefit them.

The meeting could begin only at 2.00 PM. Most of the participants were unenthusiastic. Expressing no signs of the slight that had cut him up, Prof. Carver opened the cases and arranged the exhibits made from his dear peanut on the long table kept on the dais. While doing so, he explained to them how they were made and what their uses were. The members of the committee were awe struck to see the various products made of peanut.

He said, "Ten pounds of cheese can be made from hundred pounds of milk. On the other hand from the same quantity of peanut milk twenty pounds of cheese can be made. Since enough of Vitamin B is inherent in peanut, it can help prevent pellagra."

These and other similar 'revelations' left the audience spellbound. Even after seeing with their own eyes the various items made from peanut they could not believe their eyes. There was indeed a bustle up there to see the items exhibited on the long table on the dais. Finally, the Congress representative from Alabama Mr Stegal took charge of the meeting and said:

Prof. Carver has just now given us a presentation on peanut with live demonstration. I don't have anything more to tell you. I am sure that none who is present here can claim that there exists in our country a basic industrial infrastructure

to enable one to fulfil the basic human needs. I give my word that I will present a bill on this subject in the forthcoming session of the American Congress. Prof. Carver will be there with me to explain the cause of peanut convincingly to the congress representatives.

Mr Stegal's statement was endorsed by a thunderous applause. All who were present unanimously agreed upon the resolution that more tax must be levied on the import of peanut. The association earnestly requested him to represent them before the 'Ways and Means Committee' on 20 June 1921. Telegrams, inviting him for the meeting, reached Tuskegee one after the other.

Tuskegee was astir with whispers over Prof. Carver's forthcoming Washington trip. The telegrams that poured in created an unprecedented flutter in 'Tuskegee Negro School'. Everybody came to congratulate him for this great honour. That Prof. Carver was going to Washington to discuss the 'Tariff Bill' was a great news around and was a matter of pride for the school.

At the end of all tall expectations and readiness, everyone was concerned about Prof. Carver's dress for the Washington trip! Even today he regularly wore only the same suit, which his Ames friends had made him wear with loving compulsion. Everyone around was upset over his queer habit of dressing. They were pressing him to buy a new set of suit to no avail. At last he reacted: "See, if people are very particular to see my new suit, I shall send a pair packed in a box. On the contrary what they want is myself then they have to accept me together with the kind of dress I wear."

A mild rumour, on the statements made and decisions taken in the meeting of the association, reached the members of the 'Congressional Ways and Means Committee'. In their opinion peanut was good enough for monkeys. They considered another

discussion on peanut a misplaced jock. And so, they allotted only ten minutes in the agenda for this time waster.

Within those ten minutes, Prof. Carver gave the house sufficient information about his 'low cost and high value peanut' in a savoury language that the whole committee craved to know more. When Prof. Carver was about to wind up his speech, the chairman and members appealed him, in one voice, to go on.

This sudden upsurge of interest in a neglected and condemned peanut encouraged Prof. Carver. He opened his large wooden boxes and took out the sample kits one by one. Presto! Small and big paper packets; bottles of various sizes, tins, glass tubes and the like began come out! There seemed to be an exhibition on various items made of peanut. Then he electrified the audience by his brilliant exposition on the humble peanut. While extolling its virtues he had not forgotten to stress on its medicinal values and future industrial potential.

Thinking that he had taken a long time Prof. Carver began wrapping up his demonstration. Observing this the chairman said:

"Prof. Carver, please see that there is no time limit for you here and remember that by giving more details on this topic you are only doing a favour to this assembly."

Prof. Carver found a great opportunity in this request. He elaborated on almost three hundred other items that could be made from peanut. He described to them how non-vegetarian items could also be made from peanut that tastes just the same. He explained how thirty different dyes could be made from the skin of peanut. He told them that there was hardly any part of the peanut that was useless.

"Did you make all these items by yourself? And where?"

"Yes, I myself made all these things in my laboratory. I teach in Tuskegee School, Alabama. We had been researching on sweet potato as well."

"Oh sure!" The assembly chorused in wonder.

"So we can make out of sweet potato items like ink, cosmetics, dyes and a hundred and seven other products. Oh! Let that be. We are now discussing peanut. Is there anything that can't be made out of peanut? The triple qualities of calorie, vitamins and nutrients that are present in the humble peanut make it a wholesome food substitute. We can see a bright future for peanut from industrial angle."

Then, one of the members present asked Prof. Carver:

"What has inspired you to do these things?"

"Well, in the first chapter of Genesis we are told, 'Behold, I have given you every herb that bears seed upon the face of the earth and every tree bearing seed. To you it shall be meat.' I was inspired by these words. Does the creator reveal irrelevant things?"

"True, Prof. Carver. You have done an immeasurable service to the committee. Shall I express the vote of thanks on behalf of every one here?"

The audience gave a standing ovation to Prof. Carver and their applause in endorsement of the Chairman's words drowned the hall.

When Prof. Carver was about to return after the presentation, one of the Congressional members, Mr Berkely requested him to present a memorandum on peanut. He wrote it during his return journey. At the end of the memorandum he stated:

"... I have nothing to sell. I don't produce anything. I am no expert in commerce. All I request you is the proper regulation of an improper business."



As a result of this black scientist's efforts a new era was born in the American South. Consequently peanut got registered with serial no. H. R. 2435 under the 'Tariff Bill'.

Prof. Carver, no doubt, was very happy at this achievement.

He was even happier to return to his sanctuary, the Tuskegee School, and its laboratory. □

Prof. Carver got vigorously engaged in research on his dear subject peanut. In comparison to wheat, there is fourfold protein content and an eightfold presence of fat in peanut. As the sugar content in peanut was considerably low, it could serve as a food supplement for diabetes patients.

The fame of Prof. Carver's ceaseless research, diligent efforts and inordinate intelligence began to spread far and wide soon after his victory in the octroi campaign. Invitations from various educational institutions to address them began to flood in.

Prof. Carver was meticulously punctual. It was never heard of him to have missed a train any time during his lecture tours. His 'famous coat' often created a different kind of problem for him. Since he had almost always worn the same old listless grey coat, those who came to receive him at railway stations often failed to recognize him. Consequently he had to wander along strange streets of new towns in search of the venue of invitation. Later on he became a familiar figure in the American South—the man who always wore the same old grey coat and walked with heavy and typically made cases and neatly wrapped paper bundles. He used to pack his samples in the cases particularly made for this purpose. The way he used to wrap his personal belongings was so typical that it became his unique feature.

He had an eye for detail and carefully attended to even minor specifications except one. He used to leave his night shirt in the hotel where he stayed overnight. He used to say:

"I have no right for such forgetfulness even if I am unmarried."

The next thing he would do was to write a letter of apology to the manager of the hotel where he left his shirt. □

Due to such inconvenient trips and their accompanied tensions a whooping cough that shadowed Prof. Carver life long would worsen. His regular medicine used to cause in him a burning sensation and nausea. He went to the laboratory and poured in a little peanut oil to the penchant medicine. The taste changed. The vitamin content in the mixture increased its quality and helped in curtailing the cough and vomiting sensation. □

As a result of Prof. Carver's research, scientists all over the world began to admit that each plant contained certain chemical components in it. These components were useful to fulfil basic human needs. Many followed his foot steps. They engaged themselves in digging out this hidden treasure in agriculture yields.

Now the farmers began to glean carefully each and every peanut seed carefully. Production had increased manifold. There was no dearth of markets where peanut was in high demand. There was recent news that a formulation from peanut is found to be a useful remedy for bleeding in haemophilia. By the end of the First World War investment in the humble peanut cultivation mounted to \$ 8 cores! □

In 1926 the famous Spingarn Medal of New York glittered on the lapels of Prof. Carver's lustreless grey coat. Yet, during the ceremony of presentation of the medal Prof. Carver alone remained listless. He could not easily feel free among those sophisticated people. Could he get anywhere else the ease and peace what he could get in the company of his 'little friends'?

Often his modest two-room residence looked like a small museum. All his paintings occupied the four walls of the rooms. It is better not to mention about the number of books piled around for want of room. Books dealing with all kinds of subjects

under the sun were in the collection—geography, geology, agriculture, botany, chemistry, astronomy, physics, fungi, painting, etc. There were some French books among them. All these books could help him to gain deep scientific knowledge and for reference for latest developments in the scientific world.

A variety of stone samples were heaped in one corner of the room. A stove would perennially burn with a vessel on it containing roots, leaves, stems, fruits and vegetables on the boil. His mother's only memento, the spinning wheel was kept on the table. Every day he used to dust and polish it to sparkling point. He displayed his knitting samples on the small cupboard in his room. One of his leisure time hobbies was to make flowers using wax and paper. Often, the students had to play guessing games to find out whether the flower currently resting on the lapel of his coat was a genuine one or not.

He continued to use the same old coat by washing, pressing and darning it time and again. There was no scope of further repairing or stitching on any part of the blessed pair of shoes, which he himself used to repair! Prof. Carver disliked to be pompous and showy. According to him an excessive desire for fashion was a mindless waste of time and money. He never liked to waste precious time in gossiping, small talks or arguments. He often said, 'A wise man should talk less.'

Prof. Carver had often been grossly misunderstood due to his introvert nature and unusual reticence. Though he was well aware of this disadvantage, he felt sad about it. To waste time on getting dressed up, to talk just to kill time or to maintain formal and snobbish talks etc. was not his cup of tea. That may be the reason why he used to decline invitation to parties.

One thing he liked most was to prepare food according to some new recipe and feed his friends. He also liked to talk to a farmer friend on agricultural matters sitting on the backyard of his farmhouse. He wouldn't consider it difficult to walk three or four miles to reach that place. If he came across a rare variety of

plant or specimen of stone on the way he would consider it a boon.



Prof. Carver was the inspiration behind the starting of a new Arts wing in Tuskegee School. He himself came forward to give the students training in drawing and painting. He ground peanut husk into nice paste and dried them in thin layers to make the necessary canvas to draw. He made frames for them from dressed stalks of maize. He made paints from the soil and painted pictures not with brushes but with his fingers. The students were enlightened by this new concept of art. Prof. Carver brought into fruition his unrequited love for art through such experiments.

It was by intensively corresponding with a handful of old friends in the North that he filled the void of intellectual company that he experienced in Tuskegee.

Dramatizing parables from the Bible was another hobby that he indulged in. From this liking had sprung the idea of regular Bible classes on Sunday evenings. Students eagerly welcomed this idea and Prof. Carver succeeded in imparting religious and moral instruction by judiciously mixing religion and science. Those Bible classes would begin at six in the evening. As there were not many students in the beginning he used to conduct these classes from his living room. When the number of students increased, he shifted the class to the auditorium of the school. When their number swelled further into three hundred or more, he found a place in the Carnegie library hall in the campus. Prof. Carver who fulfilled all works as his moral responsibilities, never missed these classes. Even when he had to go out of Tuskegee for his lecture tours he would not forget to make maximum adjustments of his schedules in order to attend these Sunday evening classes.

It was said of Prof. Carver that he used to take the Bible

not merely with hands but with his heart. He used to admonish the students:

"You should share with others your intelligence, knowledge, friendship and happiness. We see the saga of this self-giving for generations from Jesus Christ to Booker. T. Washington. Please do not break this continuity..."

"Tuskegee School is a medium for bringing enough meaning into your lives. Don't waste this opportunity by running after worthless pursuits. The moment when you realize that the opportunity had slipped away from your hands it would be too late..."

"Nature is God's broadcasting station. We must be capable of understanding the sound waves which are broadcast from there regularly."

Prof. Carver says about smoking, "If nose were intended to be used as chimney, then don't you think God would have fashioned it upwards during creation itself?"

Prof. Carver says about the existence of God, "Do you entertain any disbelief about the existence of God? No one has seen electricity. Agreed? But don't we all see the electric bulb all lit up with the help of electricity? The existence of God too is like that. Even if we can't see we strongly feel it."

Mixing parables and references in the proper proportion Prof. Carver would speak to the students in his exuberantly pleasing tone. The students in their turn would throng in huge numbers to listen to him.

Yet, some felt that Prof. Carver's teachings were heretical. One of the incensed individuals approached Dr. Washington with a complaint:

"George Carver's teachings are not according to the Holy Book."

"Are there not many students who attend these classes?" Dr. Washington asked the whiner.

"Yes of course. There are even some teachers among them."

"How long has this been going on?"

"I think it's for the last three years or so."

"Even when it's not compulsory?"

"True. Students attend these sessions regularly and on occasions the halls are filled out."

"Then my dear friend, what I have to tell you is that it is futile to talk about this any more. Moreover, I think that it is rather foolish to try to disturb these classes. How many students are there to attend the regular classes even when they are compulsory?"

□

It was a fact that Prof. Carver did not have a personal life or social life except that his whole life was dedicated to science and was committed to the shaping of Tuskegee's destiny. Where was a social life for this man who had always been tossed by the waves of nerve-racking responsibilities and pressures. In the midst of all these he could never afford a social life.

Except the 'Thanks Giving Day' and 'Christmas' most other days he could be traced either to the laboratory or the research centre. On every Christmas day, without fail, he lunched with his young colleague Thomas Campbell and his family. Mrs Campbell worked as a nurse in his 'Mobile School' campaign. Mrs Campbell narrates the experience that she had on one Christmas day, "Just imagine that a man of such great responsibilities who was always immersed in deep thoughts finding some time to play with my children. How easily could he make them laugh by telling stories and by acting out some of the most interesting scenes in them? Seeing his easy involvement with the children I told him that he could undoubtedly become a successful family man."

She tactfully asked him, "Prof. Carver, why can't you think of a family life?"

"Which woman can tolerate a man who stocks a room with clumps of soil as samples? I have to get up as early as four in the morning to go for a walk. What kind of a wife can understand this?"

"What is the difficulty for that? Any understanding girl would accept you."

"Would she accept my saying sweet nothings to the flowers and butterflies, eh?"

Whatever that might be Prof. Carver remained a bachelor throughout his life.

Once he almost came nearer to an opportunity for a marriage. People who knew Prof. Carver closely say that he had some tender feelings towards Miss Hunt who was teaching Economics in the school. On many occasions they were seen going for walks or eating out together. On many occasions they were seen discussing some or other serious subjects, or maintaining long silences.

Yet this relationship did not reach its natural fruition culminating in marriage. Most probably Prof. Carver himself might have scuttled the flow of this relationship away from a marriage. He had already crossed forty by then. Besides, any woman wants a man with some worldly sense as her husband. Perhaps Prof. Carver himself might have thought that a family life would be in his way of his social work. His fierce antipathy to money would cause incompatibility and so failure in married life. Prof. Carver knew well that renunciation and married life couldn't go together. Further, it was a time when the 'Mobile School' movement had been blazing new trails throughout the South.

During his forty seven years' stay in Tuskegee only twice had Prof. Carver taken leave without prior intimation. The first one was when he had taken the unfortunate decision with regard to his marriage with Miss Hunt. And soon after that she left Tuskegee. The next occasion was on a day in the year 1920 when

Miss Hunt who lived a spinster throughout the rest of her life left this world. He had no personal life as against his duties.



In a way Prof. Carver was 'everything' for students in all matters concerning them. If there were any difficulty in doing the homework a student would never hesitate to knock at Prof. Carver's door. Let the doubt be in mathematics or veterinary science, Prof. Carver used to set aside his work and clear the doubt of the student. No wonder that Prof. Carver's residence was a thoroughfare for students especially those in the science stream.

If one student brought a piece of stone to learn more about it another one would bring a dead bird. Sometimes wounded dogs used to be brought for treatment. The students simply believed that there was hardly any problem that Prof. Carver could not solve. Once Dr. Washington's son was carrying a dead bird to Prof. Carver's residence.

"Son, it is too late for any treatment."

"Don't worry papa, 'Doctor' would do something and bring it into life," his son pacified Dr. Washington.

Even Dr. Washington relished Prof. Carver's company. He never observed any formality to knock at the door of Prof. Carver even at the dead of night for any matter important for him. Dr. Washington used to remain awake late into the night due to financial worries in the day to day running of the school and other tensions created by the Whites. It was during such midnights that Prof. Carver would be awakened. Whenever he would hear the familiar knock at the door Prof. Carver would get up fast. Wearing his nightshirt he would go with Dr. Washington for a walk in the campus. He knew about the nerve-racking responsibilities that rendered Dr. Washington sleepless.

The funniest part of it all is that during these 'nightly strolls' they never discussed any of the vexing problems! Sometimes they would talk general matters. Most of the time it was only

two or three hour-long silence! When Dr. Washington got very tired and felt like sleeping they would return. Thanking Prof. Carver profusely, he would walk away to his quarters.

Once a well-wisher cautioned Prof. Carver in a mildly reprimanding tone about those 'nightly strolls':

"You spend all the day in the laboratory and spend the night walking sleeplessly in the cold. Don't you know that it is very harmful to your health? Why do you take upon yourself so much inconvenience?"

"I don't call this inconvenience. Whenever Dr. Washington needs me I consider it a matter of pride on my part to be of some help to him. The fact that he needs me itself gives me honour."

It is not that there were no differences of opinion between these two stalwarts. Even when they had any differences neither did Dr. Washington interfere with the laboratory nor did Prof. Carver in the school administration. Dr. Washington was often concerned about Prof. Carver's habit of spending hours together in the laboratory. Even while anxiously waiting outside the laboratory he never tried to enter the lab nor had dared to disturb him in any other way.

Once, Prof. Carver showed Dr. Washington an article on sweet potato before sending it for publication to seek his permission.

"Prof. Carver, you have mentioned in this article that no one can definitely say which was the original home of sweet potato. Is n't it? Then why can't we say that it is our Macon County?"

"Impossible. You can never state so. No matter in science would stand firm without adequate proof."

"But what I am asking you now is what will be the problem if we state so here?"

"If you want you may publish the statement in your own name and with your own signature on it. There'll be no signature of mine on the paper. Not only that the environment in our

Macon County is unsuitable for the natural growth of sweet potato but also I have never seen a tuber that has even a remote connection with sweet potato among the indigenous plants growing here. Suppose we publish this and the fact is otherwise what shield does the school have to defend itself from the attack of the wider public?"

"Okay. If that 's what you are saying..."

"What I say is not the question here. I openly said what I strongly feel to be true. That's all."

Dr. Washington now understood well Prof. Carver's stand on this issue and the article was published without any amendment. Prof. Carver was always careful that neither Tuskegee school nor Dr. Washington should suffer any ill-repute due to a single oversight or negligence.



It was quite heartening to see these two stalwarts having different temperaments, amicably working together. Dr. Washington was an internationally known figure who had been blessed with the gift of gab and deft managerial capabilities. Prof. Carver on the other hand was a lover of solitude and a lonely crusader against poverty who was always engaged in scientific research. Yet they had the common aim of human emancipation and ultimate desire that their final resting place must be Tuskegee.

Prof. Carver never thought it less important to convince the Government officials about the needs of the school and seek their kind help for the welfare of the institute but he was aware of his lack of oratory and knack to thrust forward. So he hesitated to step into Dr. Washington's shoes. Yet it must be said to his credit that he rose to the occasion to be the efficient oarsman of Tuskegee school after the death of Dr. Washington.

It was a fact that both these black stalwarts had many things in common. Both of them were born in slavery. Both loved the motherland immensely. Both of them believed that it was their

moral duty to set upon the task of uplifting their fellow brethren and had chosen the field of education for creatively achieving the same. Both of them could have amassed enough wealth for themselves using their ability and fame in order to lead a high standard of life. What they did instead was to turn their backs against wordly comforts and dedicate their lives in the ultimate task of uplifting their downtrodden brethren.



Dr. Washington wrote in his book 'The Story of the Negro':

It is easy for any black person to earn titles such as 'brave, daring, valient, etc.' just by criticising the Whites in public. Prof. Carver has been working for the last several years dedicatedly for the upliftment of his brethren. While performing his duties he has turned his back not only against his personal luxuries but also against his personal needs. And our so called leaders call him coward. Why? It's because he preferred more to fulfil his duties than to curse the whites.

Dr. Washington had reserved a place for Prof. Carver in his heart filled with natural love and pure sincerity as he based his activities on his duties rather than on his rights. Dr. Washington complimented Carver in so many words filled with reverence and admiration in his book titled: 'My Larger Education'. Their vision and mission united them.

Prof. Carver was one of those who felt a heavy loss in Dr. Washington's death. President Roosevelt said to him after the funeral by condoling and consoling Prof. Carver:

"There is no greater task on earth than the one which is presently on your shoulders."



SCIENCE SHALL LIBERATE YOU

It was decided to open a laboratory, with all modern facilities, in the Milbaunk Building of Tuskegee, under the guidance of Prof. Carver. Forgetting his advanced age he was involved in various activities connected with the establishment of the laboratory. Observing this, the secretary of the school trust Mr Scott said: "Today, we feel proud of ourselves as we could at least now provide some basic research facilities to a world famous scientist. Dr. Washington has done a great favour to this community by bringing Prof. Carver to Tuskegee."

Dr. Washington was constantly aware of the exceptional brilliance and commitment of Prof. Carver to Tuskegee. He did not live long to see his colleague's spectacular success in his research works. Had he lived, he would have been proud of seeing all these unparalleled achievements and the consequent avalanche of national and international accolades that began to pour into Tuskegee.



Here is a black scientist who was born in slavery and cruised along life by sheer determination. He obtained high education overcoming monumental difficulties and then landed in a high position of teaching in Iowa State College. Leaving that, he had willingly accepted a position of a teacher in the fledgling Tuskegee school. He would now go to advise the authorities in the Capital—Washington. They believe that he could help them to solve many

of their difficulties in agriculture!

Great personalities like the Prince of Sweden and the Prince of Wales would visit Tuskegee and stay with Prof. Carver. They would discuss with him a lot on flowers, peanut, sweet potato, cotton and a lot more on vegetation in general.

All the American Presidents of his time were his friends and admirers. First it was Theodore Roosevelt, and then Calvin Coolidge and finally Franklin Roosevelt.

The Prince of Sweden stayed in Tuskegee for almost three weeks. He wanted to know from Prof. Carver how the waste in agricultural yields could be utilised as raw materials in industries. He sought opinions and solutions from Prof. Carver for a number of other questions too that had engaged his mind.

On a quite morning of May, a German scientist visited Tuskegee. He was so impressed with Prof. Carver's agricultural research that he took with him to Germany three young graduates from Tuskegee to implement the system of rotational cultivation and top soil conservation.

Prof. Carver had kept correspondence with Mahatma Gandhi. He used to send many recipes on nutritious meals that would provide additional shot of energy to the leader with a weak constitution. They included an endless list of cheaply available, but very useful herbs rich in energy and vitamin contents for the starving millions of India. Most striking fact was that such herbs were available in India easily and in plenty.



Prof. Carver was the last in the chain of selfless black leaders like Frederic Douglas. They played their exceptional roles in elevating their brethren to enjoy 'equal rights' with the Whites.

When the whole world would be in comfortable morning slumber, Prof. Carver would be somewhere in the woods savouring his nearness to nature. All his attempts to unfold the

secrets of nature were made during these morning walks. On return he would engross himself in deep research under divine guidance.

Why was he doing research? What kinds of experiments and observations were he making? What benefit would the society derive from all these labours? He used to explain all these to the semi-literate and illiterate villagers in a language bereft of excessive scientific jargon. There was no showing off his knowledge to impress the listeners. People of Tuskegee would say, "He did not talk like a scientist."

How distinctly different was Prof. Carver from ordinary people! This peerless excellence was evident in his attitude, inquisitiveness and aspirations. All those were far beyond the grasp of the ordinary people. He never had any attachment with anything on earth apart from a loyal commitment to God. With a deep insight and a rare farsight he used his intelligence and natural gifts for the benefit of humanity. There was nothing in his life that was more important than his duties. He didn't have any doubt on his final goal. On the contrary, it looked as though everything had already been programmed in his life.

Everyone around him knew that there was an unrequited soul in him, which would not 'rest in peace' unless his targets were brought into fruition. Since his ultimate goal was already charted out, he was in a haste to achieve it. Keeping in mind the limit of human life, he worked ceaselessly. He fast-paced his research efforts to achieve his targets to a great extent before his death, even if not fully. Had he paused for a little while and looked back, he would have seen that his invaluable works had benefited not only his brethren but also the humanity as a whole.



He was more interested in observation than mere talk. If he saw a spider weaving its nest he too would try for hours continuously

to weave one like that. When he fails he would say, "I can't weave so nice as this spider." He had no vanity and he never pretended to be what he was not.

He used to say, "Keen scientific observation is the first step in the process of earning knowledge." And he never missed that step. This great scientist was always a keen student. The mysteries in nature always stirred his excitement.



Besides mycology he tried to experiment and research on various other subjects. None was worth publishing in any of the popular scientific journals of the day as there was hardly any revolutionary finding of any extraordinary worth. Any intelligent individual who received 'adequate training' could do most of them.

The remarkable feature of Prof. Carver's research was that all those findings and breakthroughs were immensely useful to conduct the daily lives of individual human beings. Prof. Carver was one of those great men who tried to bring science to the daily lives of human beings. By unearthing the 'hidden treasures' in plants he gifted them to ordinary people nay to the whole humanity.

Almost all the time, Prof. Carver had insufficient tools to work with. He had no facilities for acquiring standard textbook precision in his research works. Those costly, state of the art tools were beyond the reach of the institute. Using these incomplete tools intelligently he attained his goals.

Another great trait of Prof. Carver's personality was that he never considered anything as 'trash'. He believed that almost anything, say—stones, bits of paper, clumps of soil or even the twine used to tie provisions from shop—will be of use on another day. He used to untie patiently the knots of the packets and carefully spindle the threads for future use.

Once, while he was untying the threads that were used to tie the packets of some fruit saplings, his 'hawk like' eyes noticed

some unusual stuff sticking to them. Immediately he took the twines to the lab and examined. He saw some kind of fungus that was new to him. He took some slides and sent them with notes to a lab in Washington for more details. He received a quick reply:

"This fungus is not one that is ordinarily seen, but it is of high destructive capability. The type of virus inherent in this fungus is capable of completely wiping out a cotton plantation in no time."

Prof. Carver took this timely warning quite seriously, took highly effective preventive measures in proper time and saved the cotton cultivation of America from annihilation.

The 'Montgomery Advertiser', a daily that came out from Alabama published an article in its issue of 23 December 1929 on Prof. Carver's contribution to chemurgy as follows:

Prof. Carver had done a lot of agricultural research like none other had done before. There is hardly any scientist in the world today who knows the chemical analysis of vegetable products like him. Alabama will always be proud of this son of the soil.



Recession gripped the world economy during the First World War. Consequently, the demand for cotton slumped in the markets. Prof. Carver quickly started research on cotton's alternative uses in order to salvage the crop from rotting in the barns and courtyards in the South.

Presto! He produced from cotton the following items: paper, carpets, insulating boards, ropes, tyres, fertilizer, oil from cottonseeds, and even paving blocks for the roads. Most of the second-grade roads constructed during that period in Southern States were paved with these blocks.

Though Prof. Carver advised the farmers to reduce the area under cotton cultivation he never overlooked the fact that cotton

was a cash crop. Though the existing short variety of cotton plant had large buds, it had the disadvantage of getting rain-soaked and mud-slung during the rainy season. As a solution Prof. Carver developed a hybrid plant. The new variety was taller than all the ones previously existing, had big buds and was capable of easily escaping rain and mud-splash.

Prof. Carver's fruitful research began to stir the business world. He developed a very high quality hybrid cotton that was his master stroke. The Agricultural Department later christened it 'Carver Hybrid'.

Those days, the farmers burned cotton seeds right away as they thought the seeds were useless. According to Prof. Carver, there is nothing in this world that can be called 'useless'.

Prof. Carver had the vision of a seer. Whatever he touched, whether soil or cotton, turned into gold. He started his experiments on cotton seeds. Till 1919 he developed almost twenty uses of cotton seeds. Now the 'useless' cotton seed proved more valuable than cotton and highly nutritious cattle fodder too. In 1940 he developed a new variety cotton bud only with seeds, not cotton. From bud full of cotton to bud full of seeds. That was his line of thinking!

Other countries increased their cultivation of cotton. Meanwhile, synthetic yarn was developed. This new product, which was cheaper than cotton, began to flood the markets. This development heavily hit the cotton trade of the American South badly. The days when even the last bale of cotton would be sold were over. It was then a boon in disguise. He was successful in utilizing cotton in plastic industry.

Prof. Carver rose to the occasion and took up the new challenge in his stride. His research found out that cotton could usefully boost the plastic industry. This revolutionary discovery saved cotton cultivation world over with far reaching significance for the future.



At Dr. Washington's invitation Prof. Carver put his best foot forward in Tuskegee in 1896. He had always been doing research since then. He struggled with all his might to transform his brethren into 'complete human beings'. He sowed the seeds of service in society and untiringly nurtured them. After thirty nine years of efforts they had begun to yield in plenty.

It was his Alma Mater that first utilized the unique opportunity of recognizing his exceptional social service and extraordinary research capabilities by decorating him with a doctorate. While conferring on him the rare honour of 'Doctor of Science' in 1928 the then President of Simpson College said, "Simpson showed wisdom in accepting George Carver when he came for admission." By flaying at the face of colour racial prejudices, Simpson College admitted and accepted him as its own student. Simpson will always cherish this with pride.

Those days when the sobriquets 'Mr' or 'Mrs' were denied to the blacks, those among them who showed exceptional brilliance were described with substitutes like 'Professor' or 'Doctor'. The illiterate villagers called Prof. Carver with the sobriquet 'doctor' since he knew a little bit of 'treatment'. Ultimately time has proved that he really deserved this recognition. Prof. George had always engaged in alleviating the physical and mental infirmities of the illiterate villagers, their animals and vegetation. In fact his whole life was dedicated to their physical, mental and intellectual health.

Prof. Carver's constant refrain was the following, "Learn science. Only science shall liberate you." Dr. Carver taught by example rather than by precept.

There were no opportunities for him to share his findings with other scientists like Louis Pasteur. As he was a black, he was almost always left alone. It is a general fact that only by sharing one's own knowledge with others that a scientist as well as his science would grow. Since it was not possible for Dr. Carver to interact with others of his ilk he had to heavily

depend on himself for everything.

Letters coming from far and wide asking for Dr. George Carver's opinions and directions were heaped on his table. At first he used to take pains to write replies for each letter personally. Can all problems get solutions through correspondence alone? Only when the concerned parties meet together and discuss problems those solutions can be found. A scientist could get creative ideas only when he is in touch with manufacturers and businessmen. In Prof. Carver's case it could not happen. Social impediments kept this genius 'under the bushel'. He had no entry in the outside world. He got engrossed in more research works to escape this seclusion.

If Prof. Carver had made noise against this lack of connectivity with the outside world there would have been no use in those days except that it would have adversely affected his further progress. He could not have done anything for the enlightenment of his brethren. This friction would have deviated his attention from his ultimate goal.



I AM A SON OF THIS SOIL

"...Thus let us together try to unravel the mysteries of this universe. I feel that your valuable time there is being lost due to the unavailability of essential facilities for your research efforts, which would minimise the scientific output. Here you will get all kinds of co-operation and support."

That was Thomas Alva Edison's letter to Prof. Carver inviting him to take charge of his state-of-the-art research centre at New Jersey. A six-digit amount was promised as his annual remuneration. Hundred thousand dollars in one year!!

"I had given word to Dr. Washington that I would remain and work here till the end of my life striving to free my brethren from the grip of poverty and ignorance. So far I am used to work alone. It would be quite embarrassing for me to work in a huge institution like that of yours. Moreover, the works here are only half-done and much remains to be done.... I have difficulties to come...."

Prof. Carver, who had so far never succumbed to any kind of temptation, replied promptly and politely declining the plum of an offer. Offer of thousands of dollars could not tempt him to abandon his chosen path.

Prof. Carver's reply impressed Edison immensely. Edison appreciated Prof. Carver's outstanding commitment to his brethren. He autographed a copy of his own photograph and sent it to Prof. Carver as a memento and there began the story of a deep friendship.

Some interesting facets of Prof. Carver's financial dealings can be gauged from the experiences of Mr Earl Wilson who worked in the bank attached to Tuskegee school. It happened in 1923 when Mr Wilson had just newly joined the branch. It was nearly the closing time. Seeing Prof. Carver waiting restlessly at the entrance of the bank, Mr Wilson came forward and greeted him.

"It would be fine if I can get my cheque...."

Mr Wilson was confused as it was only the 23rd of April. The cheques of all the employees would be due only on 1 May. How could he do an exception for Prof. Carver? What does this mean?

"Sorry Prof. Carver, there is still time for the salary cheques to be issued."

"Son, you have newly come here, haven't you? Please call some one else."

Seeing this, the senior clerk of the bank rushed forward and greeted Prof. Carver.

"Prof. Carver, please wait a minute. I'll bring your cheque in a jiffy."

Mr Wilson was slightly annoyed and went back to his seat. Meanwhile the senior clerk opened a drawer and carefully pulled out a cheque leaf from under the neatly packed lot. He kept the rest of them safely back, pushed the drawer and closed the safe. Then he handed over the cheque leaf to Prof. Carver. Tucking it safely into his pocket he left the scene in a hurry after profusely thanking the clerk.

Wilson was quite puzzled and said:

"This is a very strange style of working. On what ground did you give Prof. Carver his cheque before 1 May?"

"Don't you see that all these cheques belong to Prof. Carver?"

The senior clerk said while pulling the drawer and showing the neatly stacked bunch of cheques.

"What's all these? Prof. Carver seemed to have made a lot of money from his research works. Isn't it? Still, before 1 May like this?"

"Mr Wilson, you are mistaken."

Protesting this statement the senior clerk said.

"All these are Prof. Carver's salary cheques only. Have a careful look at them. Don't you see that the cheque at the bottom of the pack is of 1 May 1915?"

The senior clerk said to Wilson showing the bunch of cheques again.

"The cheque which I gave to Prof. Carver now is that of April 1915. Please be careful to give Prof. Carver the cheque of 1 May 1915 when he comes here next."

"The year 1923 is going on now," Mr Wilson protested.

"Who told you it's not? Now we have to place order for a bigger draw to keep safely all these cheques. All his monthly salary had been kept here by these cheques."

"Do you mean to say that all his salary cheques had been lying idly in this bank? How can he conduct his financial dealings then?"

Mr Wilson was all the more confounded by this explanation.

"Whatever that may be. But I can tell you that no tailor's bill had come here for payment so far. Further, there has not been a raise in his salary all the years . . . not even by a cent!"

"Pitiable indeed. What a shameful neglect of a great scientist! Is the style of functioning here such a sham?"

"What neglect? What sham? How much did Dr. Washington and the directors who followed him pressed Prof. Carver to accept a raise? This selfless soul leading a simple life never agreed to one."

The refrain was always the same, "What am I going to do with so much money? I am an ordinary son of this soil."

Mr Wilson left Alabama in 1925. Prof. Carver had consumed only the cheques up to 1916. There was not even a cent

difference between the first salary he had received in 1896 and the one drawn in 1943 for the last time, \$ 125/- per month!



No one knows exactly how many students benefited from the cheques lying idly in the pages of books or languishing at the bottom of draws in Dr. Carver's room. If any such student came back to return the amount Prof. Carver would say jokingly, "Heh fellow! When did I give you money?"

Showing some pretensions he would send back the young fellow. Though he never kept a record of such confidential help, it seems that there was hardly any student in Tuskegee who had not liberally received from Dr. Carver's meagre bounty.



One day he gave a student a one-dollar bill and challenged him, "Take this and show me what you can do with this. Quick..."

The student was indeed a disciple of his guru. He went out with the one-dollar bill and purchased a hen, some quantity of poultry feed and some eggs for hatching. After a few months he gave Dr. Carver a report about his 'great venture'. Now the hens are the major source of his income and to date he had a net profit of \$ 50/- (Dollar fifty only). Dr. Carver patted him for his remarkable enterprise.

Dr. Carver expressed an exemplary courage and resilience during adversities. Mr Logan, a past student who presently worked in the campus bank, had seen several such cheques lying scattered all around the shelves and draws in Dr. Carver's room. Mr Logan often prompted him to deposit those cheques in the bank and Dr. Carver obliged him.

Unfortunately, the 'Great Depression' of 1933 gripped the nation severely. When banks in the country were getting drained one after the other, Tuskegee bank could not remain an exception. Mr Logan came this time to meet Dr. Carver and

quite apologetically apprised him of the gravity of the development.

When his life-time savings had been washed out thus, Dr. Carver took the inevitable event light-heartedly, "There might be more use of this money where it had flowed into. What is wrong if the money has gone to the really needy?"

When the world around him was ready to sacrifice anything for the sake of money, and were living and dying for its sake, Dr. Carver considered money a mere means of exchange. He used money only for the fulfilment of the basic necessities. Of what further use was money for a 'Universal Man' who had inherited the earth!

Dr. Carver considered it a privilege and right to struggle to redeem his illiterate and ignorant brethren. Many tried to tempt him with fat salaries but keeping up his promise to Dr. Washington, he did not leave Tuskegee. He breathed his last in his chosen sanctuary that was Tuskegee.



When a disease was affecting the peanut crop of Florida, the afflicted farmers approached Dr. Carver for solution. They could save the crop as they followed Dr. Carver's instructions in good time. As a gesture of gratitude some of them collected hundred dollars and sent the same to Dr. Carver and promised to send the same amount every month. Dr. Carver politely returned the amount saying, "When you cultivated peanut God didn't tax you. How can I charge you for treating the crop once?"



Once a businessman manufacturing tiles commercially from saw dust on a large scale based on Dr. Carver's own formula, invited him to take charge of his lab with an offer of a handsome remuneration annually. Dr. Carver as usual, declined the offer politely. The businessman kept in touch with Dr. Carver and

visited Tuskegee as often as possible getting instructions and directions from him freely.

□

Dr. Carver never desired riches or worldly comforts nor was he bothered about securing or insuring his life in old age. He was detached from all worldly comforts. His admirers all over the world sang him hosannas as a great scientist, dedicated social worker, tireless researcher and the like. Yet he remained glued on earth upswept by the flutter and storm of praise.

He wrote his name till his last breath as 'George W Carver' without attaching any degrees or designations.

□

Mr Houston was a businessman from Georgia. He engaged in commercially producing butter from peanut. Once when the butter prepared in his plant was not getting hardened and oil was oozing from it emitting a stench like that of spoilt milk. He sent his chief chemist Mr Moss to Tuskegee for advice. If some one came to Tuskegee it was to see Dr. Carver! Tuskegee and Carver were synonymous.

Dr. Carver made some chemical modifications in the proportion of the ingredients and enhanced the quality of the butter to near perfection. Further, he freely taught the chemist how to make chocolate from peanut cakes and a high quality soil conditioner from the cheaply discarded peanut peal.

Mr Houston was impressed by the enthusiasm and affection showed by Prof. Carver towards his products. He came personally to Tuskegee to thank Dr. Carver for liberally supporting him to salvage his product. He presented a seal-skin blanket to Dr. Carver as a souvenir of their first meeting. No one had seen it since as it was resting at the bottom of a trunk.

On the occasion of such visits Dr. Carver shared with Mr Houston his knowledge of producing other items from peanut.

Further, he discussed with him how to economise time, money and labour during the production process. When Mr Houston heard that Dr. Carver considered knowledge as a means to improve the lives of ordinary people, he was much impressed and wholeheartedly invited Dr. Carver to take charge of the group of his companies in Georgia. This time also Dr. Carver's reply was the same, "This is my mission station. From here I shall try to help you and direct your operations as best as I can."

Yet after this meeting, the Houston group of companies benefited for further fifteen years from the directions and instructions of Dr. Carver. This son of the soil was quite detached and dispassionate. He never surrendered to the glitter of wordly presents?

Though Mr Houston was initially disappointed, he bided his time for a need to rise in Dr. Carver's mind and then his chance to fulfil that need. Indeed it proved a long wait for Mr Houston.

One day an exasperated Houston asked Dr. Carver, "Dr. Carver, is there not anything in this world which I can present to you that could be of some use to you. Isn't there anything that you can ask from me?" This time this 'yogi' relented.

He said with considerable hesitation, "I need a diamond."

Was there not a greater joy for Mr Houston than this? His dream that one-day Dr. Carver would ask him something that he could afford to give had now come true. Within a week's time a diamond-studded ring was received by Dr. Carver.

During his next visit Mr Houston inquired, "How do you like my present?"

"Certainly it is very beautiful."

"Then why have you not worn it on your finger?"

"Finger? Oh...it means? Right.... Did you think that I requested for it to wear on my finger? I am sorry... I asked you..."

Saying this, Dr. Carver led Mr Houston near to a glass shelf. There was a small collection of minerals and precious stones in

it. Showing them Dr. Carver said, "In this small collection diamond was wanting. I could show my students many other precious stones except diamond. Hereafter, my students need not depend on their imagination to know what is diamond like. You have now solved my difficulty."

Once again Mr Houston had to accept defeat.

So Dr. Carver requested him for a piece of diamond to be used as a mere specimen in his collections.

Sooner than later Mr Houston obdurately managed to give something to Dr. Carver. He had ordered a plaque of Dr. Carver in bronze and presented it to the Tuskegee institute. □

Dr. Carver who never fell prey to any bait did not want anything for himself. He only thought that he should be instrumental to understand his race.

'After having worked hard for so many years, if I leave my works half-baked on the way, they won't be remembered as my works. Whatever work I do, its credit as well as benefit should first go to my race,' was his stream of thought. □

People from all over the world were aspiring for his advice and directions. Soviet Union invited him to advise them on the agricultural reforms as part of their five-year plans. Some Mexican mine owners very badly needed his advice. The West Indies plentifully received Dr. Carver's help in changing the quality of their food production.

Some one would bring clump of soil samples from his infertile soil to Dr. Carver, for his opinion on treatment. Some others would bring dry shrubs from their fields. All of them came to see the 'doctor' of Tuskegee seeking solutions to their endless list of problems.

Once a man brought his young son named Johnston, who

was stricken with paraplegia for 'treatment'. It threw up one more challenge to Dr. Carver. He remembered his college days when by massaging with peanut oil he would 'cure' the sprains and minor gashes of his classmates. Occasionally he even got cheers from fellow students as his skilled fingers could relax their tightened muscles.

He had succeeded in making certain cosmetics from peanut cream in Tuskegee laboratory. He remembered having given once a sample cream that he had developed there to one of his lady colleagues. Her observation on the cream was significant, "Doctor, your cream is very good, but for the last few days I feel like my face is getting puffed up and flabby. Besides, there is a slight chubbiness on the face."

When Dr. Carver remembered that incident a new idea dawned upon him. He made a cream similar to the one given to his colleague. As Johnston's legs were totally crippled, Dr. Carver did not promise any miracles to his parents. Nevertheless he started the 'treatment' immediately.

Later, on the occasion of the Third National Chemurgy Council Meet at Michigan, he revealed to the participants with the help of slides how Johnston who was paraplegic started to walk slowly with the help of crutches. He ended his speech by telling them how Johnston later became a flashing star in the basketball and football teams of the college. He said finally, "I don't categorically claim that it was due to the medicinal qualities of peanut oil that Johnston's legs were cured but it is a fact that I have been massaging many such people using peanut oil and I have witnessed an improvement in their condition."

The revelation that he had made in the Chemurgy Meet echoed throughout the nation. Soon parents of polio-affected children from different parts of the country began to make a beeline in front of Dr. Carver's 'clinic'. When their numbers swelled beyond manageable limits he would even utilize his spare time available on Sundays for 'treatment'.

Tuskegee received about two thousand letters monthly soliciting advices and instructions regarding various ailments.

Out of about 250 patients he had treated almost all got considerable improvement and some even got completely cured. Yet, there was no unanimity among the medical fraternity till today whether it was the quality of peanut oil or the deftness in Dr. Carver's hands that had effected the cures. Since he was not a medical expert Dr. Carver wisely desisted from making any further comments on this.

In the year 1932 thousands of children got handicapped due to the outbreak of Poliomyelitis in America. Black as well as White children were brought to Dr. Carver for 'treatment' from as far away as the Northern states of America. There were long queues of parents patiently waiting their turn with their polio-affected children in their laps or hips!

The attention of the whole country turned towards the 'treatment' given by the 'Peanut Man of Tuskegee'. There was a large polio clinic in Georgia. Black children were not allowed there for treatment. Therefore in 1939 the 'National Foundation for Infantile Paralysis' collected a large sum and helped to establish a polio clinic in Tuskegee. Famous orthopaedic surgeon Dr. Shenault was the director of the hospital. He says about Dr. Carver's massaging expertise thus:

"He had a thorough knowledge of anatomy and physiology. His fingers easily distinguished non-functioning nerves from that of functioning ones. He had a natural ability and special touch in this matter than a trained and experienced physiotherapist."

Yet, there were people who could sadden him and ridicule his great efforts by calling him 'Nigger'.

Once, while Dr. Carver was engaged in examining the crippled leg of a polio-stricken child a hefty White man barged into the room skipping the queue and said, "Come on man. Quickly examine my leg..."

"Not possible now...", Ignoring the slight Dr. Carver went

on examining other patients waiting in the queue.

"Heh Negro! How dare you to say no to me? Hey!" The White man continued rudely, "I came here from a hundred miles distance not to hear your 'no' you understand man?"

Dr. Carver did not like such outrage. He could have instantly left the place but this time he did not wish to ignore this affront as usual and decided to express his dislike this time. He said, "Neither my medicines nor my prayers can cure your sick mind."

Dr. Carver never tried to get patent for the peanut oil extraction techniques that he had developed. On the contrary he had been trying to find out a method by which the poorest of the poor could get this oil at a reasonable rate and in plenty.



It was around this time that John Hopkins University produced 'Nutritious Herbal Food Powder' under the guidance of Dr. Carver. This was with the purpose of saving the children of tropical countries suffering from starvation.



Dr. Carver was going to Baltimore to address the students of 'Morgan College', which was a black bastion. The authorities of John Hopkins University somehow got wind of this visit and wanted to make use of this occasion to felicitate this 'Black Yogi', who had turned his back to fame and money and work tirelessly and consistently, in an organized get-together. The registrar of Morgan College Mr Edward Wilson was included among the special invitees.

Dr. Carver reached Baltimore wearing his 'signature suit' that had almost completely faded due to liberal use and having patch-works all over. The typical pair of shoes that he had worn had telltale signs of numerous repairs on them.

"When you achieve extraordinary success in ordinary things

the world will focus its attention upon you. Can you produce durable things from trash?

"You might be thinking that you can do effective service only in places where you are needed, isn't it? But I tell you that you must be capable of reaching for service wherever you and your service are ignored, ridiculed and even protested against. Even where you may feel that some one have propped invisible banners telling 'you are not welcome here'. This indeed had been going on from time immemorial. Was it not the same welcome that Jesus Christ had received? What happened in Galilee? Yet, today the whole world calls him 'Saviour'.

"It is the richness of your genius that must make you a deserving person in front of the world. Whether you can deliver the goods that the world expects from you or not irrespective of your complexion is the question.

"You shall know the truth; truth shall liberate you. Follow science; it shall unshackle you."

The students of Morgan College listened to Dr. Carver's speech in rapt attention. It seemed that their whole being was tuned on their ears. And at the end a thundering applause drowned the hall in a fitting response.

John Hopkins University too felicitated him in the same night. The auditorium was colourfully decorated to receive a great human being. An air of expectancy pervaded the ambience of the University. Those ecstatic moments saw the sky drenched in glory!

Dr. Carver reached the hall with meticulous punctuality. He wore the same old and faded grey 'patent' suit. The only consolation was that the shirt he wore inside was a fresh one and matching to his complexion. Etiquette restrained the audience from having a hard look at his unique apparel and it's dressing. Yet in helpless moments they furtively glanced at his clothes.

Mr Edward Wilson describes briefly the situation, "...Soon

my feelings began to wither away. I felt giddy and my mind was almost numbed. I felt humiliated. How could I then expect the hall to erupt abruptly in a paroxysm of roaring laughter? Ripples of laughter surged through the hall. One could see Dr. Carver talking incessantly on many matters in his unique style. I saw them leaning forward in their seats and sharpening their years to hear him intently. Then, it was our turn to restlessly blush in our stiff trousers, starched collars and pinched shoes. This great man was munching and tasting the menu arranged in front of him and talking about all things under the sun, including the wonders of the universe. He peppered his talks with humorous anecdotes. Then I realised the genius hidden behind his calm 'facade'.

"Seeing our discomfiture in our self imposed snobbery, he was amused. He was great. He alone was capable of lightening our hearts as he made us laugh with his sense of humour."

But, Dr. Carver himself was stuck in a whirlpool of embarrassment, once. It happened in a function organized in connection with the installation of his plaque in bronze presented by Mr Houston in 1933. A monumental get-together was arranged in Tuskegee on that day. On the eve of the installation a dress rehearsal was conducted.

Many important personalities from different parts of the country were invited to the gathering. There was a festive atmosphere all around. While everyone was running about to make the function successful, Dr. Carver went on with his routines as if nothing much was happening around. Even while all preparations were going on with meticulous precision, what worried most was the patriarch's dress code. Even though this was almost a daily irritant, the solemn occasion warranted a clear solution.

At long last, some senior members of the institute volunteered to take upon themselves the responsibility of convincing Dr. Carver of the need for a change in the dress for

the occasion and on the colourful day they forcefully made him wear a new pair of suit.

The function got rolling. Eulogies of this great man's life flowed out incessantly from the dais. They were paeans to his great achievements resulting from extraordinary determination and hard work. The audience that had been overflowing in the hall sang hosannas to him.

In between the dint and uproar, Dr. Carver, an elderly man, had been charged with embarrassment in his strange clothes. He was more beleaguered by the black gown with a hundred pleats that puffed around him. As the plaudits became louder his discomfiture was mounting. At last the great man got up to address the audience. The hall got drowned in the tumult of applause. There stands on the dais now a wise old man! An ascetic, embarrassed and suffocated in a dress that he doesn't like!

Somehow the following words came out from him, "I have never worn such clothes before. I am uncomfortable in this. I will never wear this again."

Gathering the overflowing black gown with both his hands, he got down from the dais and zoomed out of the hall. He went straight to his room. Then he wore his favourite jute-apron and straight headed for the laboratory.



LEAD KINDLY LIGHT...

Dr. George Carver has now crossed the age of seventy. Forty years have passed since he had stepped onto the portals of Tuskegee. With advancing age, his working horizon too got widened. Two secretaries were appointed to handle the bulk of letters flooding into Tuskegee each day.

The Department of Agriculture appointed Dr. Carver as Assistant Director, 'Mycology and Plant Disease Survey'. This appointment burdened him further and it became difficult for him to do all works single-handedly. More than ever Dr. Carver began to feel the need for a sincere assistant.

Mr Patterson, then chairman of Tuskegee School Trust, reminded Dr. Carver once again, "Doctor, for the last forty years you have not agreed for a salary raise. Okay. Could you at least now agree for the appointment of an assistant to share and support your efforts?"

In fact, a 'heir apparent' was urgently needed to carry on Dr. Carver's unfinished works with the same sort of zest and zeal. The search zeroed in on an energetic and young Prof. Austin Curtis who was teaching in the Agricultural College of North Carolina. Dr. Carver liked him at first sight. He thought, 'Such eyes can see.' And within a short while Dr. Carver's surmise was proved to be true.

Before long, Austin Curtis developed a new colour dye from Magnolia seeds. Dr. Carver was very happy to see his research

capabilities and the necessary daring for independent thinking. Now, one more seeker of truth began to work behind the closed doors of Dr. Carver's laboratory.



Dr. Carver was happy to have a disciple like Austin Curtis who had passed all tests and proved his mettle. Dr. Carver wrote appreciatively to Austin Curtis' parents once, "I had never dreamt that Austin would become a part of my life and activities in such a short while. He is intelligent and creative. I am happy to have him as my colleague. I feel that I have got my life span extended after his arrival into my life."

This master-disciple bond remained unbroken throughout their lives. The Guru in his turn had been relentlessly concerned about his disciple's continuous progress and flowering his efforts. Curtis continued his experiments in the Tuskegee laboratory and made much headway in preparing more combinations of colour dyes. One such cheap but qualitatively richer dye made of magnolia was later known as 'Curtis Brown'. Dr. Carver was fortunate enough to share in this joy.

Dr. Carver always called Austin Curtis 'Baby' and his colleagues called him 'Junior Carver'. In course of time a father-son bond developed between them. Dr. Carver was indeed blessed to have gotten a very caring assistant in Austin when he reached his twilight years. Austin Curtis was indeed willing to take up the 'sweet yoke' from Dr. Carver and pull it successfully. He was indeed worthy to be an heir apparent to Dr. Carver's legacy. Curtis never asked anything from Dr. Carver but an opportunity to work. Dr. Carver reflected:

'How did I spend the days of my life so far without Austin near me?'

Austin Curtis took much pain to promote Dr. Carver effectively through the press. He used to call press conferences for this purpose and give detailed information on Dr. Carver's

achievements to the outside world.

Some years back Dr. Carver was invited to give a talk at the Marble Collegiate Church in New York. During the speech he said the following:

God has given intelligence and knowledge to man which is to be utilized for the progress of the world. There are no books in my laboratory. When some scientific truth has to be discovered ideas flow into me on their own. What is to be done is already dormant in the pure spring of inspiration.

Unfortunately, this statement kicked up a huge press storm that was taken up by leading newspapers in the country and pushed Dr. Carver pretty much to the edge.

"These kinds of statements indicate Dr. Carver's lack of scientific attitude. A real chemist should not deny the importance of books and lay more confidence in ones own genius. It is not becoming of him." (Editorial of New York Times).

Dr. Carver was much hurt and saddened by the gross misinterpretation of his words. He pondered, 'How can one complete research activities if there is no divine help and a deep acquaintance with books? What use is there in doing further research on previously established findings?' Dr. Carver was a creative scientist. He would present to the world entirely new findings.

'How can one find books on the research methods of a fresh scientific breakthrough that has not yet seen the light of day? What relevance was there, in such situations, to follow old methodology?'

It is an undisputed fact that Dr. Carver had developed his new methodology by his deep studies and sharpening of his intellectual capacity. If he had not had such deep studies of scientific books how could he have achieved those new discoveries? If he was not working under the divine guidance how could he have recognized the Divine Signs of the Times?

Even after an avalanche of negative statements in daily newspapers, Dr. Carver did not make any statements in order to clear his stand. In fact he did not have any time to waste on such futile wrangling. After this incident he declined to give open interviews to newspapers. Dr. Carver was already a much-neglected scientist by virtue of his being a Black. His reticence had further isolated him and many of his great works went unknown to the outside world.

At this juncture, Austin Curtis came forward tightening his sashes and fighting with a unique determination to defend Dr. Carver's innocence. With fierce denunciations he ripped apart the lame arguments put forward by Dr. Carver's detractors one by one and easily disarmed them. The interviews he gave to the newspapers in his uncompromisingly sharp language were scathing counter attacks on them. He laboured to project to the outside world the unacknowledged radiance of Dr. Carver's personality and his quality contribution to the world of science. With this all the loose talks about him had an end.

Those who had even remotely heard about Dr. Carver now came to regard him from close proximity. The newspapers, which maligned him so far, now began to recognize his greatness that he amply deserved. The New York Times wrote an editorial on him in an issue of 1939. The concluding words congratulating him on the occasion of his receiving the prestigious 'Roosevelt Medal' read, "Is there anyone like Dr. Carver in our generation who had done so much good for the promotion of agriculture that ultimately benefited the Southern states?"

Following this, many articles began to appear in many newspapers acknowledging Dr. Carver's achievements one after the other. The media finally began to recognize and accolade him for having caused a resurrection of the American South and for triggering a prosperous era in the whole country. He was accorded many citations and honorary degrees. Yet, Dr. Carver refused to be carried away by such storms of eulogies.

When they newly opened a laundry section in the 'Dorothy Hall' of Tuskegee campus, he said, "This is my real Mission Station. I am at home here."



Dr. Carver's patriotism shined brilliantly above all other considerations including colour-racial prejudices. In the year 1917, when the First World War was raging like wildfire, a few students were selected from Tuskegee school and were sent to Harvard University in Washington, for special military training. Some of them complained about the open discrimination that prevailed there. Prof. Carver pacified them and said,

You had gone there to get special training to fight for the nation's defence. Then you have to ignore any other irrelevant things. Who told you that ignorance and hatred are the monopoly of any one particular town? Whether in the South or North we can find many such ignorant fellows. The dance of such fanatics should not spoil our capacity to serve the nation. Be vigilant as you are going ahead.

A time will come when these fanatics will realize their mistakes. You will be glad on that very day when you walk rubbing your shoulders with them. Let those who see your actions understand that there is no work a black person can't do. Here we are trying to unearth the talents hidden in you, so that you will be capable of moving ahead on your own.

The 'outside world' may advertise the shortcomings of Tuskegee students. Miffed by such provocations you may jump out for your own defence. What's the use of being impatient and angry? That may shake the roots of our fledgling institution. We must take all these agonies and mortifications in our stride as chastening lessons for our good. That is the time you will surely move ahead. If you have nothing but complexion to recommend you, you have

taps. He had to find taps for the Blacks.

Irrespective of whether a gathering was held on the second or third floor of a building he had to use the 'servants' staircase' to go to find the drinking water tap. Another lesson he learnt from this experience was that he had to take his stomach-full of food before the commencement of any meeting to avoid going hungry throughout. When it was difficult to get a mouthful of water to quench his thirst, less said the better about any provision made for food at the venue. If those were the experiences of a world famous scientist, then what would have been the condition of an ordinary Black? Such humiliating experiences had pained him immensely. Yet, he would keep his mouth shut. He never worried about his personal well being. The only precaution he would take was to avoid unnecessary exposures to such occasions and places.

Some one would compliment him, "Dr. Carver, how happy you must be feeling now for having done so much for your own people?"

His unspoken words would be, 'If you had removed just one stone from my path, my journey would have been more smooth.'

On many occasions he had to wander over the streets of unknown cities in the heat and dust of summer in search of a public inn, as most of the hotels did not admit Blacks in. He had to strain himself a lot, physically and mentally, to avoid such insults whenever he had to go out of Tuskegee. In spite of this, he endured the travails of his travels as long as his health was in good shape. Though the unending discriminations in the outside world deeply pained him, he never allowed his personal inconveniences to come in the way of his duties. He would never miss an opportunity to light a candle in the darkness.

Dr. Carver conducted lecture tours even in Mississippi, where racial hatred was intolerably rampant as literacy was

minimal there, under the auspices of the YMCA. A senator from Mississippi once commented, "What is there so special with this peanut farmer to give to our (White) children?"

Many cities of Mississippi State had 'welcomed' Dr. Carver waving Black flags. There were even placards on which it was written, 'Hey Nigger, blacken your face!'

Ignoring even these protests he continued his lecture tours. Student groups gave him good response.

A women's university in Mississippi had once organized a lecture series by Dr. Carver. They had to cancel the series at the last moment due to objections from a group of fanatics. The lectures were then held at another venue in a Black school and the parents of White children prevented them from attending those lectures.

Some liberal White students openly apologized to Dr. Carver for the pain caused by the above incident through their school magazine, "We regret the fact that we had given the heading 'One Step Forward' to the editorial of the last issue of our news magazine. Now it seems that we were in a hurry. When we wrote thus, we were inclined to think that the mentality of the American South had become more liberal and that colour-racial differences had been a thing of the past. How happy would we have been if that were the case? We have learnt with regret from the humiliating neglect that was meted out to Dr. Carver the other day, that the truth was to the contrary. So we stand where we stood before. We regret that we could not wipe out our narrow mentality nor exorcise the demon of discrimination yet.

"We should not bury our heads like ostriches blaming circumstances but should have to vigilantly work against this evil tendency. All these are for a radical change and for a good future."

Racial discrimination denied Dr. Carver many of the good experiences that made life rich. He could not roam freely in a garden, peruse an art exhibition appreciatively or drown him in a music concert as the Blacks were prohibited in such places. Dr. Carver could have got some consideration due to his reputation but they had to be muffled attempts lest the fanatics should flare up and insult him. How can the one who live in muck savour fragrance? How can a persecuted soul appreciate art? How can one strike a chord of tender notes on the broken strings of a mandolin? How can joy spring from a saddened mind?

Even when writhing in the pain of persecution, Dr. Carver never uttered a hateful word. "Throwing water on my face, no one can say that it was rain. No one can drag me so low that I should hate him... innumerable acts of injustice had been heaped on me... if I had ultimately squeezed the energy of my brain and guts to defeat my persecutors there would have been no energy left in me to complete my mission...."



Instead of getting swayed into racial conflict and thus letting his works suffer, Dr. Carver preferred to stay rooted in his works. It was due to an unwavering dedication that he could do universally useful noble deeds. He could lift up not only his community but also the whole of American South from the pits of hunger and want. He became revered due to his selfless and detached service to humanity. Dr. Carver is a living example of how one could serve his country and the whole of humanity with God given faculties of body and mind.

The artistic sensibilities dormant in the collective consciousness of the Black, the hidden qualities and their unfulfilled dreams all gathered form and shape and in the fullness of time 'incarnated' as George Washington Carver. Any one who was blessed to have had a meeting with him would be drawn to his attractive humility, soft-spokenness and the lively aura of a

many sided genius. It was a well-known fact that Dr. Carver was spared of egotism while God reserved that 'quality' for his detractors.



Many of the latter-day Black leaders blamed Dr. Washington, Dr. Carver and the Tuskegee community for not opposing the Whites. They asked why did those leaders silently tolerate the pride and arrogance of the whites? These critics had conveniently forgotten the fact that it was the dedication and sacrifice of Dr. Washington and Dr. Carver that nourished and protected the fledgling Tuskegee community from the attacks of opponents. This care and caution enabled them to ignore the provocations and tolerate the insults heaped on them. As the Tuskegee community was quite aware of their extraordinary qualities, they wholeheartedly co-operated with their social welfare programmes.

Austin Curtis asks, "From where did the present day Black leaders cracked open in one morning? Did they not come from a community nurtured under the wings of Dr. Washington and Dr. Carver? Or else were they dropped down from the blue sky one day?"

Dr. Carver's deep knowledge in chemurgy was a riddle among the scientific community. He believed that science is a means to satisfy human needs. He could therefore easily tap the resources of scientific knowledge. He would reveal his scientific conclusions that foretold a revolutionary future for agriculture products, which no seer could predict. He used to create awareness among the people regarding the possible utilization of agricultural products as raw materials for agro-based industries apart from being mere food staple. A new era in the ongoing Industrial Revolution dawned as a result of the research works done by Dr. Carver. Peanut was contemptuously neglected in America till 1896 but it attained sixth rank among the cash

crops of America. He had unearthed hidden treasures from earth. When he saw that people had been attracted towards them sufficiently well, he headed for other trails.

Now, there would not even be an iota of doubt about the industrial potential of agricultural products. There would not be any shortage of agricultural products to the industries. The Southern States were now poised for a new era in Dr. Carver's own lifetime.

The journey was getting over. And they saw light at the end of the tunnel!



FULFILMENT

George Washington Carver had tilled deep in the womb of time and sowed superior seeds. When they sprouted, he nurtured them with water and manure. In the fitness of time they began to yield in plenty.

It was the year 1940. A time when the world was reeling in the throes of the Second World War.

Dr. Carver, through his research efforts, had been trying to redeem human values trampled under the feet of destructive powers. He encouraged people to love the earth more and be more close to her.

His brethren in Alabama had nothing of their own. They had no means to acquire any thing. They had only ample needs. Using those inadequate, meagre tools he had done the magic. Ample to wear. Hundreds of recipes. Materials for shelter. From where could he produce them? It was from the soil of Alabama where the humble peanut and sweet potato once checked the monopoly of cotton empire.

It was a time when America depended on Germany for import of colour dyes. During the war, diplomatic ties were snapped. Germany stopped the supplies and the American industry was hit. When the source of colour dyes drained out Dr. Carver gave America colour dyes developed from plants. He showed such valour in extracting almost five hundred varieties of colour dyes from leaves, fruits, stems and roots of about 29 different kinds of plants. They were durable, of high quality and equally useful in cotton, wool, silk and linen.

Once a paint manufacturer who got wind of this new

breakthrough invited Dr. Carver to join his company. He promised that he would set up a laboratory with all latest facilities and enclosed a blank cheque with the invitation letter. As usual the cheque was promptly returned with a covering letter politely declining the offer. He had not forgotten to enclose therein freely an additional list of five hundred formulae of how to make colour dyes.

In spite of discovering several colour dyes, they were not financially feasible for the Southern rural communities. The rough, porous and unseasoned wood of the shanties would absorb a large quantity of paint making it unaffordable for the poor farmers. At the same time, their huts would rot in rain if they were not painted soon. Dr. Carver took notice of it.

Dr. Carver had already discovered colour dyes from the soil of Alabama. He added linseed oil to the dye that yielded a good result but it was a costly proposition for the farmers. Next he tested them by mixing used automobile oil with it. After testing the dye from various angles he tried the final version on the shanty of a girl student living about twelve miles distance from the school. He found it to be of excellent form. Now, high quality paints were to be available to the farmers in as much quantity as they needed at very affordable rates.

The story did not end there. It is this same paint that was used in low cost Government Housing Schemes such as Tennessee Valley Authority (TVA) and Farm Security Administration (FSA). Tuskegee school received grant from the government for manufacturing as much paint as they needed for the completion of those buildings. How to obtain high results using low priced materials is a valuable lesson one had to learn from Tuskegee.

Dr. Carver's fee for advice was only three cents! That was required for the postal stamp if any one was sending a post card. During 1940-42 he answered the queries through newspapers under the column 'Prof. Carver's Advice'.

During the period of the Second World War, Dr. Carver

published a number of articles under the caption 'Nature's Garden For Victory and Peace' under the auspices of Tuskegee experimental centre. Through this series, he acquainted the American people about weeds and wild vegetables. Also he explained how to prepare receipts from them, their value as nutritious food etc.

In fact Dr. Carver had started very earnestly the study of these weeds. He used to describe them as 'vegetables growing in wrong places'. He meticulously researched on almost two hundred and fifty varieties of weeds and classified them. These weeds had more vigour and vitality in them than the pampered vegetables grown on fertilizer and water. They were not only palatable but also are more nourishing than many a vegetable cultivated under the security of the fence. The weeds would grow fast and had enough longevity. There was no need of keeping vigil over termites or locusts to protect their growth. They can even be used as substitute for daily food.

Under the guidance of Dr. Carver, senior students of Tuskegee used to prepare sumptuous meals out of the weeds. He himself would prepare a detailed list of the different kinds of weed and recipes from them. He used to say, "As long as these weeds are growing abundantly on American soil, no one in America would die of starvation. They can serve not only as staple food but also as medicinal herbs."

One thing he always failed to understand was why people who were usually reluctant to use these herbs raw would eagerly grab the medicines made out of them.

□

Once a teacher of Tuskegee brought his mother to fulfil her desire to meet Dr. Carver. At that time he had been doing some experiment with a variety of herbal samples. The old lady straight away went to see Dr. Carver. Seeing the segregated bunches of various herbs on table, she began to name them one by one and

describe their domestic use. His mother's over enthusiasm embarrassed the teacher.

Dr. Carver set aside the works he had been doing and asked the old lady to sit near him and sent the teacher to take care of his works. He then sincerely sought more information on those medicinal herbs from that mother who had spent half of her life under slavery. The old lady was extremely happy to have untied her bundle of knowledge on native medicinal herbs before Dr. Carver! Then Dr. Carver encouragingly said, "I had been talking for the last several years with people on various herbs that had a lot of medicinal potential. Surprisingly, I have never seen anyone having such deep knowledge as does this old mother have in these matters."

How pampered was the old lady then!

Can any of the medicinal herbs escape the attention of this 'eagle-eyed' magician who waved his wand and held sway over the American South?

A veterinary surgeon who had recently been appointed in Tuskegee campus felt it below his status to seek advice from Dr. Carver.

'Why should I? He is not a qualified veterinary doctor.'

One day in the height of summer, six cows fell down and died one after the other in the campus. Even after detailed examination of the carcasses the reason for this epidemic like development was not found out. They examined the grass, but in vain. The reason was not known.

After all attempts came to naught, the veterinary doctor reluctantly met Dr. Carver. No other go.

"Right. This happened once in the past. Similar long summer and terrible drought..."

"We have not come here to learn about long summers and drought. We want to know what happened to the cows."

"Of course.... So..."

Tucking a rucksack on his back Dr. Carver walked away.

The vet was dumbfounded. Thinking that the old man was out of his mind, he returned to the stables.

After a brief search for something in the nearby pastures, the old man returned panting. Then he emptied the sack, "This is the problem that suffocates you."

The vet failed to understand the connection between those raw juicy weeds and the current problem.

"What's this?" he asked ruefully.

"Rattle box. The botanical term for this is 'Crotalaria'. They grow plentifully on the edges of the causeways and by the hedges. It is very difficult to distinguish these plants from among other similar plants. Even when the cows eat these to an extent but together with other grass there is no problem. When in hard summer other grasses wither away, these plants keep up their greenish look and growth. Cows ravenously eat these 'rattle box' as they are greenish, juicy and tasty but poisonous. The cows that eat only this 'rattle box' without any other ingredient get poisoned."

"So, what can we do now?"

"If you don't want any more cows to die, you and your students have to go ahead and eradicate these 'rattle box' from the fields."

Without even waiting to hear a word of thanks Dr. Carver walked away. Once he reached his laboratory he began to prepare an article on this poisonous and harmful weed.

Dr. Carver used to roam about the Tuskegee campus very often. On those occasions he would examine the growth of the trees he had planted in that arid land long ago.

They have grown taller! He was too old to climb them once again. Giving a handsaw, he would request a student passer-by, to clip a dry or broken branch carefully. Tuskegee students were always happy and ready to assist Dr. Carver. They knew well that it was quite an experience to work for Dr. Carver. And they would always learn something new by working for Carver. He

used to nail on each tree trunk plaques mentioning its common name, botanical name, species and uses with the help of students. This practice continues in Tuskegee even today and those towering trees growing sky-high along the sides of Tuskegee roads, eloquently proclaim Dr. Carver's love for greenery.

Dr. Carver had an extraordinary vision of a seer. If many of his projects pertaining to the welfare of people did not see the light of day on time, it was due to short sightedness of those who had the power to move or slow down their implementation. For example, he had mooted the need for soil conservation as far back as 1899. He had even submitted reports on protecting and developing forests. The 'Great Depression' of 1929 in America triggered the implementation of the soil conservation projects on a 'war footing'. The pity is that only a catastrophe (that happened between 1932-1933) could move the government to action.

'There is nothing in this world that is useless. Protect everything carefully. Each of which would be useful at the proper time,' the whole of America listened to this Carver maxim.

As a result of cultivating crops according to his instructions the agricultural output enhanced in America. Dr. Carver had taught the farmers long time back how to process and protect the excess yield properly but inexpensively. The language Dr. Carver used to communicate with the ordinary semi-literate farmers was very simple, easy-to-understand and bereft of technical jargons. For instance, he would say 'dry it' instead of dehydrate. These simple instructions encouraged many people to safe-keep fruits and vegetables.

Dr. Carver prepared and printed a bulletin with the caption 'how to preserve nutritive food for long time' and distributed them among the villagers. Even the minutest details like how an ordinary stove, wire mesh or a mosquito net could be used to dry food items in the sunlight and what were the different items that could thus be preserved, etc.

It was Dr. Carver's favourite sweet potato crop that had saved the American soldiers who were engaged in the First World War. After the war the 'dehydration' project of sweet potato was to be implemented on a large scale. Even though the master plan was already available, its implementation had to wait till the breakout of the Second World War. In other words it was a long wait of twenty years! Yet, the credit for the vision and implementation of it had gone to some one else. Dr. Carver ignored this gross injustice, as he was gratified to see that he could at least be of use indirectly to his country. He prepared a highly effective soil conditioner from the discarded peanut peel. It was more absorbant and contained high percentage of nitrogen, potash and phosphate. This conditioner was of better quality than 'Peat Moss' imported from Germany.

Dr. Carver had to wait till 1940 to realize the large-scale implementation of this project too. Meanwhile, he sadly witnessed lacks of tons of 'useless peanut peel' being burned out in the country. Similarly there were many instances where he had to wait for long years for the implementation of even tested and fool proof products to reach the market commercially.



A rare meeting between the world famous business tycoon Henry Ford and Dr. Carver happened in the year 1937. The meeting of the two stalwarts was something like the configuration of two planets! One of them was born in the downtrodden Black society, while the other was from a family that had tremendous influence in society—a billionaire.

Yet, there were some striking common features making them peers! Both of them believed in the 'dignity of labour' equally well and sought refuge in enterprise. Even after the 'Ford Motors' was solidly established, Henry Ford did not remain inactive. He had been restlessly inspired by the desire to create something

new always. It was at this juncture that he heard about Dr. Carver who was continuously engaged in research in an ill-equipped laboratory and doing social work among the Black community. Before long, he found time enough to come down to Tuskegee to meet Dr. Carver personally.

Each of these two personalities knew the other's capability and achievements well. They respected each other. At the first meeting itself their internal strings were attuned and minds opened up. Even when they shook hands for the first time their faces illumined with an unworldly joy!

It didn't take much of a time for Henry Ford to recognize the selfless and rapt mind of Dr. Carver. Henry Ford experienced that Dr. Carver's personality had depth and was lucent at the core. And that this detached soul did not have any need in life.

'Eternal values cannot be purchased. On the contrary that which can be bought at a price does not have eternal value.' Dr. Carver was a living example of these golden words by Henry Ford.

The environment in which he lived did not recognize and appreciate this truth. People give importance to 'who says it and not what is said'. When someone's stars cross and circumstances impede him, even if that one is a great genius, it takes time for him to be noticed by the world. Evil clouds of circumstances can some times eclipse even a great genius. Something like that had happened in the case of Dr. Carver.

Henry Ford had been successfully experimenting with the cultivation of soybean in Dearbarns. He succeeded in developing many useful materials from them. Dr. Carver deeply desired to see these experiments of Ford and get a first hand information of it. So he wholeheartedly accepted an invitation he received at the first meeting and accordingly visited the place. As soon as he returned to Tuskegee he got involved himself in researching on soybean.

In a short while Dr. Carver developed from soybean some kind of plastic, which was found to be useful to manufacture motor spare parts in Ford Motors. Similarly the oil he extracted from soybean became a main ingredient in automobile paints.

Soon Henry Ford wanted to come nearer to the American South. He purchased a large tract of land in Georgia and set up an advanced research centre in agriculture. He employed Whites as well as Blacks in the centre. He constructed residential quarters for the employees. Schools were opened. One of the schools there was named after Dr. Carver. All the buildings were painted using the dye, which Dr. Carver developed from the soil of Alabama.

Since Ford frequently visited Tuskegee the attention of the whole world especially that of the Whites were drawn there. Many of them personally visited Tuskegee. They were much impressed by the hospitality and discipline that existed in Tuskegee. Before long many of them were ready to contribute to Tuskegee's progress. Funds began to flow in to help the development of Tuskegee.



Once a daily published a joint interview by Dr. Carver and Henry Ford. At the outset Mr Ford told the reporters, "Prof. Carver himself would answer all your queries, because we two have the same thought process."

Henry Ford was happy to have got the friendship of a selfless human being as well as a dedicated scientist. Dr. Carver on the other hand was happy to have got a farsighted and liberal human being as his friend. Further, he had enough financial clout to give wings to Dr. Carver's dreams. One was born with a silver spoon in his mouth while the other was a son of the soil—the whole earth belonged to him.

This tie-up between a yogi and a multi-millionaire enhanced

their enthusiasm for social work. Without waiting for opportune time, they went on working ceaselessly. Always they were engrossed in cultivating innovative ideas.



Dr. Carver now ran eighty plus. Yet unmindful of his health he reached Dearbarns with the help of Austin Curtis. Henry Ford had got ready a laboratory with ultra modern facilities for his friend. He welcomed the master-disciple twosome warmly to the new premises. Expecting monumental developments in this rare meeting a curious media had already laid siege to Dearbarns!

Presto! Synthetic rubber was born in the lab of Dr. Carver on one fine morning. The American manufacturers now had no need to depend on imports of rubber from other countries and low priced rubber was available now.



On one summer day Henry Ford embarked on a new project. Accordingly he sent two senior officers to Tuskegee. They recruited some bright students and trained them in Ford Motors in Detroit. For the Blacks of the South there was no need now to migrate to Detroit.



Mr Ford knew very well the power of his money. It was a time when he had been thinking of a way to felicitate Dr. Carver duly. He was a son of the soil who wanted nothing. Therefore Henry Ford thought of constructing a house for Dr. Carver. House means it can be a mansion too, but Dr. Carver agreed for a log-hut like the one where his mother lived in Diamond Grove.

Henry Ford was greatly touched by Dr. Carver's exceptional love for his mother's memory. In this matter Mr Ford too was not far behind anyone. He constructed 'Carver House' in Greenfield with the best timber available in the vicinity.

Dr. Carver was very happy to have this house! How many years had he to wait for the fulfilment of such a simple desire? Eighty-plus and Dr. Carver was going to stay in his 'own house'. Before setting foot in the new house he stopped short. He felt for his mother. Tears swelled in his eyes.

Henry Ford presented an exceptional souvenir to his friend on the occasion of this unique house warming. It was a cup and saucer, one of the novelties brought by his mother when she came to the Ford household after the marriage. Henry Ford gave his mother's invaluable memento to his friend. What a motherly love!



Dr. Carver was once sitting on the dais on the occasion of a meeting. It was in the year 1938. The local host of the meeting introduced him, "We consider Socrates as a great philosopher. He says, 'I know one thing certainly, that I don't know anything.' If we scan the whole world today, we can find only one person who passes through a similar situation. He is none else but Dr. Carver. He too does not know anything about his parents or his date of birth. He says about his knowledge, "If I have some knowledge in me it is received from God Almighty."

Dr. Carver replied mischievously, "Today, I am disappointed. Usually during a meeting when some one introduces me, I could come to know many new things about me. Here, I could not hear anything new about me so far."

Past did not disturb Dr. Carver any more. He couldn't even claim that the name he wore was his own. He was successful in emancipating his people from the chains of economic, educational, and to a great extent social constraints. He would never know of his ancestors. Yet, the future could make amend for all this. He has put an indelible stamp of his unique personality on history.

More than forty years have passed since Dr. Carver had set foot in Tuskegee. All concerned unanimously decided to hold a function to felicitate him. Without paying any heed to Dr. Carver's objections they collected about two thousand dollars and placed order for a bronze bust of their 'saviour'. They wanted to make use of this opportunity to thank the man who freed them from the shackles of hunger and death. The unveiling of the bust was scheduled for 2 June 1937.

There was an enthusiastic crowd of people waiting to meet Dr. Carver. He was wearing the same faded and tattered grey coat presented by his Ames college friends with loving compulsion.

Unmindful of the weakness of his advanced age Dr. Carver smiled at every one through his wet eyes and enthusiastically went on inquiring about every one's health and well being.

By an exceptional use of chemistry Dr. Carver could raise the living standard in the whole of America. As recognition of this he was awarded the prestigious Roosevelt medal. In connection with its presentation President Franklin D. Roosevelt came to Tuskegee in 1940.

He told an ageing Dr. Carver, "You are a great American. All the findings in your laboratory made America strong. And you have played a role in the country's attainment of the present status."

By 1940 the number of buildings in Tuskegee had gone up to eighty-three. More than two thousand students were studying and researching there in about two hundred different streams. During that winter Dr. Carver's assistant Harry Abbot purchased a new set of suit paying \$125. As usual he refused to wear it. Mr Abbot said, "Sir, we have purchased this suit paying \$125. Will you waste so much money?"

Dr. Carver who had never spent \$125 for his dresses so far

in life silently wore the new pair of suit without any further arguments. Barring such minor peculiarities, his life was generally simple and exemplary. He continued his early morning walks in spite of his advanced age. Soon after returning home from walks he would plunge into his research works till late in the evening and several nights at a stretch when the need arose. His laboratory and instruments in it were simple. The routine has not taken a beating so far.

There would be a perennial line of visitors. Their ignorant and impertinent questions often annoyed Dr. Carver. On rare occasions he even walked out of the laboratory to avoid such harassments. Using such occasions some of those 'visitors' would shoplift several fascinatingly simple tools from the laboratory. Dr. Carver failed to understand why they were taking those broken pots, bottles, cups, pestles, etc.

Quite naively he used to ask, "Why are they taking these broken instruments when they are easily available in the backyard of their houses? Are they not unnecessary exercises?"

Dr. Carver would once again collect the same kinds of broken tools from the villages for partially replenishing the loss. How could he know about the 'satisfaction' derived by those visitors who pilfered the broken tools? They cherished them as relics of a well-spent life.

Some of those people were fascinated by the tools, others by his selfless and undesirous work. Many people wondered why he did not enjoy either a salary rise or royalty for his research works. Dr. Carver in turn wondered what was there so much for these people to wonder.

He used to say, "Why should I accept reward for utilizing God-given gifts?"

Hearing this, a sophisticated person would asked him, "Dr. Carver, if you had saved all that money from your salary and royalty for your research, you could have spent a large amount of money for your brethren and brought cheer in to their lives."

He would respond, "If I were running after money, I would have forgotten my brethren...eh."

In those days Austin Curtis was running about giving final touches to his long cherished project. He was engaged in setting up a 'Carver Museum' by collecting and keeping all available specimens of Dr. Carver's art and works of a period that spanned the past fifty years.

Today one can see among the exhibits in the Carver Museum the following items: specimens of Dr. Carver's works of art from his childhood, the findings of his valuable research on peanut, sweet potato, the jungle grasses and such other medicinal herbs, his paintings, handicrafts, samples of laces and knitting, the apparatuses and tools used in the laboratory that was once picked and shaped from discarded items in the backyards of households and many other tell-tale goodies of his life and times.

Modern day students are expected to see the drawings exhibited in the Carver Museum and recall how Dr. Carver and his students painted those beautiful pictures dipping their fingers in the dye made from the soil of Alabama (one drawing from that collection was purchased by Luxemburg Gallery).

The museum was meant to be instrumental for training minds, shaping their future and be referred as foundation of the future of Southern States. Even after proving their ability in science faculties there were hardly any promotional avenues remained open in front of the Black students. Even bright students among the Blacks could not easily utilize their knowledge for their own upward mobility. For example a Black chemist after taking his degree could at the most make some cosmetics or patented medicines in a small-scale unit. Invisible banners reading 'Blacks prohibited' were hung up everywhere. At many places they were legally prohibited too. In such circumstances it was difficult for a Black to utilise his hard earned knowledge in real sense. Naturally this discouraged and distracted the Black students from science faculties. This would

be a severe loss for the Black community.

Dr. Carver found a way to lead the Black students out of this vicious circle. He established the 'Carver Foundation'.

Then, one fine morning the world heard, "I, George Washington Carver, hereby dedicate 'Carver Foundation', which was constituted by me along with my life's savings (\$33,000/-) Thirty three thousand dollars to Tuskegee Institute." This news spell-bound the world.

Many helped him to fulfil his dreams. A structure worth two hundred thousand dollars (\$ 200,000/-) was erected. Thousands of scientists and students were benefited by this foundation. The students of science faculty needed well equipped laboratory for their advanced studies. To fulfil this need, he established the foundation.

Whatever honorarium he had received from the institute—for making a barren land fertile using his creative hands and fulfilling his promise to Dr. Washington—he returned to the institute. He knew that he had sowed best seed in the womb of time. He had tended it with conscious efforts and it has now sprouted and rooted firmly. It was growing healthily. Soon it will be bearing fruit.

Dr. Carver humbly expressed his gratitude for those who recognized and appreciated his vision thus, "God could have completed these works entrusting somebody else in my place. Then what's the need for complimenting me for his selection?"

Truly. But, God has revealed to man His divinity by entrusting His divine mission to a man like George Carver.



One could see on Dr. Carver the tell-tale scars of a ceaseless service that spanned across four decades. Austin Curtis restricted his long journeys outside the campus and did not allow him to remain somewhere alone for long time. When Curtis had to go out of Tuskegee on important official works, students according

to their turn did this care on Dr. Carver. They would take rounds to watch in the lab. Dr. Carver was in fact annoyed by such continuous attention. One day he blurted out, "If I had to tolerate all these 'rounds', had I not got married?"

The students then suggested to him to have a peeping glass fitted on the main door of the laboratory so that they could keep watch. Dr. Carver agreed. Around 1935 he was ill. He suffered from anaemia. Soon he recovered and regained health. This illness made this ageing scientist weak and tired. Now they arranged a residence for Dr. Carver nearer to the laboratory and the foundation to facilitate easy access to both. Considering his advanced age and weakened constitution, Henry Ford installed a lift in the new residence so that Dr. Carver could easily climb up and down the floors. He was so excited by this arrangement that he would not miss any opportunity to show this lift to the visitors streaming by.

Now, there was hardly a day that passed without finding Dr. Carver's name printed in the newspapers. Visitors flooding into Tuskegee will feel privileged to have a glimpse of him. Dr. Carver who was weakened by ripe old age had no will for public relations. Neither did he want to be an exhibit. Dr. Carver never succeeded in overcoming his shyness, however much he tried.

In order to escape the attention of these 'pilgrims' often he used to take food in a corner of the kitchen instead of the dining hall. There, he got the company of students and he had no problem to mix with them sharing their light jokes.

In order to grab such golden opportunities, the students would voluntarily ask for kitchen duties. They always aspired for Dr. Carver's company. He would then narrate the stories he had not told them during his radio talks or meetings. He used to caution them about the many 'pit-falls' in life while narrating his childhood experiences. Every day he would tell them these things that would increase their knowledge and boost their confidence.

Now, the outside world was not yet ready to leave him alone. The 'International Federation of Architects, Engineers and Technicians' unanimously elected him as the 'Great Personality of 1940'.

This was the news that flashed on the front pages of the newspapers one fine morning. "Young artist Bensfather bags the \$250 Benjamin Award for the best painting under the title 'The Most Beautiful Thing in the South'." The topic was a smiling Dr. Carver in a 'smart new coat'. The most beautiful thing in the South indeed! Dr. Carver was very happy on that day. The reason was that the artist who had drawn his picture had been encouraged.



Tuskegee was lately bustling with a shooting spree. They were producing a documentary based on Dr. Carver's life. Without caring about his health, Dr. Carver co-operated with them. 'What's wrong if a young producer or director gets encouragement or promotion from this?'

Now-a-days Dr. Carver preferred to remain in his room. Hardly did he go to the laboratory.

The Government of the United States of America declared Mary's log-hut, in Diamond Grove, a 'National Monument' in 1942.



'MAHANIRVAN'

Over the past few days, activities in Tuskegee lost their usual flurry and sheen. They slowed down to a very low key. Dr. Carver slid on snow outside the porch only two weeks back. Some student passers-by helped him stand up and hurriedly reached him to the laboratory as per his wish. He sat there for some time, observing an unfinished experiment. Soon, he hobbled his way to the office and had a talk with Austin Curtis. Then, he returned to his residence and could never again step into the world outside. A worried Tuskegee plunched into gloom.



Dr. Carver was bed-ridden. He was handing over his unfinished works to his 'heirs apparent'. He called Mr Patterson, the president of the school and entrusted him with a thick bunch of National saving Certificates. He told Patterson, "Use this amount for the running of the Institute. Let the world know that I have purchased these Certificates deliberately. Patriotism is not the monopoly of any particular race."

He was reading from Maria's old leather-bound Bible whenever he was free. Aunt Maria would come to his mind. His promise to her that he would work for the welfare of his brethren was redeemed to a great extent. And her words—Son, learn more, nay much more and use that knowledge...



Really, wanted to be a singer or an artist... yes, fulfilled that wish to an extent. These hands are of a gardner.... Jaegar liked them much. These hands tried their best to make the life of the brethren livable.

See how the rain's dripping through the leaves! And lightly desending on the green earth. Slowly penetrating... Where has that brute force of manic downpour gone now? This branch peeping in through the window too is mine. Sprang from the little sapling that I had once planted on an arid land. How tall and huge it has become now! Dr. Washington, you should have been here now! How excited were you to see a mere green lawn then? How happy would you have been to see now the trees that colonnade Tuskegee roads? Alabama now is all draped in lush green without allowing the sun rays drip down their canopy...

Celestial music is flowing out of the pipe organ in the chapel and is filling the air. How nicely did Mrs Millholland play the piano! I don't know why I was feeling like crying, when I heard her piano recital! In fact one gets peace from music as I am experiencing now.

It is getting dusky outside. Chilly breeze blowing in... this coat has given me immeasurable warmth in life. With what loving compulsion did they make me wear this then! This warmth is different... endearing!

This is the only snap-shot of my brother Jim. The only impression of his face... Our photograph together in the Neosho fair... he was lucky... I don't know how our mother looked like!... he could at least call her 'mamma'.

There was no desire left. Nothing, except loyalty to God and a nearness to this earth. This perpetual orphanness had been following him like a shadow.

A liberated soul here was getting finally snapped out of its earthly bondage... after giving the world a glimmer of light. ... Having stamped an indelible mark on history...

Tuskegee heard George Washington Carver's last breath...
5 January 1943.



In the hill-slope, beside Dr. Washington's resting place for the past twenty years, Mother Earth received George Washington Carver's mortal remains.

Within a week after the funeral, Austin Curtis received a letter from a Missionary from Belgium Congo:

"We had been grateful to Dr. Carver for the last twenty five years. The peanut milk prepared according to his prescription and instructions had been a great boon to us. Due to 'Tse Tse' fly menace and attacks from wild animals, it was difficult to tend domestic milch cows in the African hinterlands. We were indeed in a fix as how to milk-feed babies who could not avail their mothers' milk.

"We kept in touch with Dr. Carver through correspondence in 1918, seeking his valuable advice. He promptly replied extolling the virtues of peanut and elaborately explaining how to extract milk from it. Accordingly we prepared peanut milk and could effectively save the lives of innumerable new born babies.

"I want to give thanks on behalf of my people who benefited from Dr. Carver's benevolence. We thank all of you who have had a share in that great life."

The world had lost a great yogi. Does any one have a right over that 'Heavenly Bliss', besides Dr. Carver?



Relevant Facets of G.W. Carver's Life

- Birth : Diamond Grove, Missouri, 1864.
- Education : Primary—Neosho (Missouri), Fort Scott.
Middle school—Minneapolis (Kansas).
College—Simpson College, Indianola (Iowa), Iowa State College of Agriculture (Iowa), Bs. '94, Ms'96.
- Service : Appointed as faculty member in ISC, 1896. First Director, Agriculture and Dairy Farming, 1896-'43.
- 1899 : Mobile Agricultural School started.
- 1908 : Last meeting with Moses in Diamond Grove.
- 1916 : Fellowship from Royal Society of England.
- 1921 : Speaks before the Congressional Ways and Means Committee.
- 1923 : Spingern Medal—instituted by Joel Elias Spingern in 1914. Awarded by the committee for upliftment of the Blacks, turning the attention of the Whites towards the Blacks, and for creating understanding between the races.
- 1928 : Doctorate from Simpson College.
- 1941 : Doctorate from University of Rochester.
- 1942 : Mary's log-hut in Diamond Grove declared a National Monument.
- 1943 : 5 January 1943. The End.